AMERICAN PSYCHOLOGIST

VOLUME 16



NTIMBER 12

December 1961

Published Monthly by
THE AMERICAN PSYCHOLOGICAL ASSOCIATION, INC.

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AMERICAN PSYCHOLOGIST

Journal of the American Psychological Association, Inc.

Volume 16

December 1961

Number 12

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AMERICAN PSYCHOLOGIST is published monthly at Prince and Lemon Streets, Lancaster, Pennsylvania. Subscription: \$10.00. Single copy: \$1.00. Communications on editorial and business matters and advertising should be addressed to the American Psychological Association, Inc., 1333 Sixteenth Street N.W., Washington 6, D. C. Address changes must reach the Subscription Office by the tenth of the month to take effect the following month. Undelivered copies resulting from address changes will not be replaced; subscribers should notify the post office that they will guarantee second-class forwarding postage. Other claims for undelivered copies must be made within 4 months of publication.

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ANALYTICAL STUDIES OF DRIVE AND REWARD 1

NEAL E. MILLER Yale University

WANT to present some recent research which my students and I have been pursuing. These studies are interrelated, but they reflect a variety of my own interests as well as those of different students who have contributed greatly to them. Therefore, they cover quite a range, beginning with some purely behavioral studies, and ending with a combination of behavioral and physiological techniques.

In order to put these studies into proper context, I shall from time to time briefly summarize certain earlier work from my laboratory. For the benefit of those who have not had extensive experience with research, I shall mention a few of the difficulties and failures, as well as those successes which ordinarily are all that is published and hence give a false impression of the actual process of groping forward into the unknown. But, even so, I shall not begin to do justice to the arduous exploration, only some of which has led forward.

While I realize all too well the difficulties of trying to prove the null hypothesis, I believe there should be more mention of negative results in publications, not only to give a truer picture of scientific research, but also to prevent later investigators, one after another, from proceeding in the same way into the same quagmires.

At the purely empirical level, drives and rewards obviously are important in the performance of learned behavior, be it individual or social, normal or abnormal. Thus all behavior theorists staying at this level and applying the empirical

from Thorndike (1898) on have used the empirical law of effect in some form or other. Many advances have been made, and many more can be made, by

¹ Address of the President to the sixty-ninth Annual Convention of the American Psychological Association, New York City, September 3, 1961.

Work on the studies cited in this paper was supported by Grants MY647 and MY2949 from the National Institute of Mental Health of the National Institutes of Health; United States Department of Health, Education, and Welfare; Bethesda, Maryland. The work of Angus A. Campbell and Donald Novin was supported by Grant G5818 from the National Science Foundation, Washington, D.C.

law of effect to behavior in the laboratory and in the home, in the classroom, factory, and clinic. As you may know, I have made some such applications (Dollard & Miller, 1950; Miller, 1957b, 1959; Miller & Dollard, 1941). My present purpose, however, is to try to analyze some of the fundamental mechanisms involved in drive and reward.

EFFECT OF DRIVE ON REWARD AND LEARNING

Everyone agrees that the level of drive can affect performance, but there has been a long, vigorous controversy over whether it also affects learning. As you know, Tolman (1932) initiated this controversy which has been carried on by other expectancy theorists (Hilgard, 1956). He contended that animals exposed to a learning situation without any motivation learn "what leads to what," but do not display this "latent learning" until they are motivated to perform. One of the difficulties in resolving this controversy has been that in the complete absence of any motivation it is hard to get animals to expose themselves to the mazes and other types of learning situations commonly used. A completely unmotivated rat would be expected to sit completely still. But for the learning theorist there is not much future in watching rats sitting still. How can we surmount this difficulty?

As a means of exposing unmotivated rats to water. I asked one of my students. Donald Jensen, to try to develop a fistula into the mouth. With considerable ingenuity, he developed the polyethylene fistula illustrated in Figure 1. This enters in the back of the rat's neck (where it is hardest for him to bite or scratch it out), passes under the skin, is anchored by a blob of dental cement, plunges down through the snout, and emerges into a little metal tip on the top of the palate. With further perspicacity, Jensen suggested that this fistula might be used to elicit and record conditioned tongue licks. The tongue completes an electrical circuit with the little metal tip. This technique was further developed with the help of another student, Richard C. DeBold, who performed with me the following experiment on the effects of thirst on conditioned tongue licks.



Fig. 1. The oral fistula used to elicit and record conditioned tongue licks.

During the first, or learning, phase of the experiment, 64 male albino rats were given a total of 150 trials during which a flickering light was a signal for an injection of water into the mouth. Every fifth trial was an unpaired test trial. All rats were on a schedule of 22-hour water deprivation. Four experimental groups were run with different strengths of thirst achieved by the following treatments immediately before each day's training: (a) strong thirst with no drinking before training; (b) moderate thirst, allowed to drink before training 70% of amount usually consumed; (c) satiated by drinking ad lib. one hour before training; (d) supersatiated by preceding procedure plus injection via the mouth fistula of an additional 70% of daily water consumption, most of which the rat allowed to drool out of his mouth. We wanted to be absolutely sure that this last group was completely satiated. And it really was.

As a control for spontaneous level of licking and for pseudoconditioning, four similar control groups were run with exposure to the same number of lights and injections which never were paired with each other. Figure 2 shows the results for these

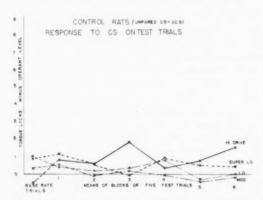


Fig. 2. The four control groups for pseudoconditioning show a low level of spontaneous licking which is not consistently related to number of training trials or level of thirst.

control rats. There is a low level of spontaneous licking which does not change throughout the training and is not markedly or consistently related to the level of thirst.

Figure 3 shows that, during test trials, the performance of the satiated (LO) and supersatiated animals was approximately the same as that of the pseudoconditioning controls. The moderately thirsty animals showed definitely better conditioning, and the highly thirsty ones obviously were the best of all. There seems to be a clear relationship between drive and learning. However, it is possible that the two nonthirsty groups actually were learning that the light led to the water, but were not performing because they were not motivated.

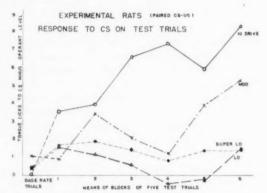


Fig. 3. Performance during conditioning as a function of

In order to test for such latent learning, half of the rats in each group were given five trials of exposure to the light alone (without water) when they were motivated by 22 hours of thirst. The other half were tested following normal satiation. The results are presented in Figure 4. Between the dotted lines just right of the center, we see that, when the experimental test is under low drive (actually satiation), the performance is within the range of the control test at the extreme right for spontaneous level and for pseudoconditioning. These results are yet another demonstration that performance is low under low drive.

On the left-hand side we see that when experimental animals were tested with high drive in order to bring out any latent learning, those originally conditioned with high drive gave many conditioned licks; those originally conditioned with moderate

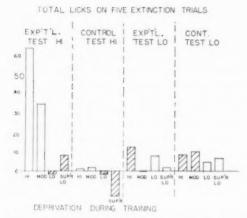


Fig. 4. Performance during testing under high drive (22-hour water deprivation) or low drive (normal satiation), as a function of deprivation during training.

drive gave approximately half as many conditioned licks; and those conditioned with low or superlow drives were within the range of spontaneous licks, as indicated by the control groups. Thus, when the effects of drive on learning are separated from those on performance by tests designed to bring out any latent learning, a clear-cut relationship between strength of drive and learning remains. This result is contrary to the prediction from Tolman's (1932) expectancy theory. It emphasizes the importance of drive.

Figure 5 shows the effect of strength of drive on the unconditioned licks to the water during the training trials. It can be seen that the water elicited more licks in the thirstier rats. Contiguity theorists, following the Guthrie (1952) tradition,

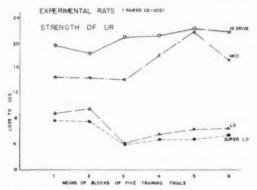


Fig. 5. Unconditioned licks during conditioning as a function of training trials and strength of drive.

could use this relationship between the drive and the unconditioned response as a basis for explaining the superior learning of the more highly motivated group, without having to assume any relationship between the strength of thirst and the *rewarding* effects of water. Thus, while the results went against the expectancy theory, they did not differentiate between reinforcement based on contiguity alone and reinforcement based on contiguity plus reward. How can we differentiate between these two possibilities?

Unsuccessful Attempts to Condition Responses Elicited by Electrical Stimulation of Motor Cortex of Rat

If one could elicit a response without motivation and reward, one might test between the contiguity and the reward theories of reinforcement. A considerable number of years ago, Roger Loucks (1935) apparently did this by implanting electrodes in the motor cortex of dogs. He paired a cue for over 600 trials with leg lifting elicited by stimulation of the motor cortex in three dogs without producing any conditioning. But by adding a food reward, he produced conditioning in two other dogs. This result seemed to show that contiguity alone was not sufficient for learning, while contiguity plus reward was.

I wanted to repeat this highly significant experiment and, in addition, to try a latent learning design to see whether, after pairing the cue with the motor response elicited by stimulating the cortex without reward, subsequent trials of pairing the motor response with reward (but without the cue), would cause the response to appear on final test trials with the cue but without motor stimulation or reward.

After considerable work, one of my students, Derek Hendry, found a place where leg movements could be elicited by stimulating the cortex of the rat, and also designed an apparatus for restraining the rat and recording the leg movements. But a large amount of additional effort yielded confusing and negative results.

Finally, we decided to see whether thirsty rats restrained in this way would learn the leg withdrawal as an instrumental response to get water without any central stimulation, much as they will learn to press a bar. They did not. Apparently rats react badly to restraint and are poor at learn-

ing discreet, leg retraction responses. We had achieved no results from almost a year of work on this project. Perhaps some radical, or even minor, change would make the procedure work, but it was time for Hendry to concentrate on a PhD thesis, so he prudently changed to a safer problem.

Meanwhile, I found that Giurgea (Doty & Giurgea, 1961) had been able to establish conditioning in an animal by pairing electrical stimulation of a sensory area with electrical stimulation of the motor cortex, provided the trials were very widely distributed. But did the motor stimulation which he used serve as a reward, either like the Olds and Milner (1954) stimulation in subcortical structures, or by relieving boredom? The latter hypothesis would explain the need for the wide distribution of trials since the novelty effect of a stimulus is known to be subject to rapid habituation by massed trials and, as would be expected from this fact, Arlo Myers and I (1954) have found that widely distributed trials favor learning rewarded by weak exploration. Furthermore, Bower and I (1960) have found that strong reinforcement is required the more resistance a response must overcome. Thus, if massed trials generate more reactive inhibition, they should require more reward. Such considerations suggest that Giurgea might get conditioning, even with less widely distributed trials, provided he added a reward.

I have just speculated that stimulating the motor cortex might have a mild rewarding effect. One could test for such a reward by determining whether the cortical stimulation will help to maintain some other response, such as bar pressing originally learned for food. If the cortical stimulation is rewarding, it should help to prevent the extinction of such a response (Miller, 1961a).

On the other hand, it is possible that the elicitation of an arousal response, rather than reward, is the basic requirement for effective learning. It is also possible that contiguity alone is sufficient, or that where an additional resistance must be overcome, a central excitatory state must also be conditioned by contiguity to serve as a booster.

Can Responses in the Sensory Cortex Be Strengthened by Reward?

At the moment I am shifting my efforts on this problem somewhat. I still am attempting to secure evidence on the effectiveness of contiguity alone compared with contiguity plus reward. But at the

same time. I am exploring the possibility of objectively studying certain phenomena which may be relevant to imagery, hallucinations, and mediating responses. Various investigators have electrophysiologically recorded so-called sensory conditioning. For example, if a tone is a cue for a distinctive rhythm of flashes of light, the evoked potential to the flashes originally recorded from the visual cortex can sometimes be recorded to the tone alone. But such conditioning characteristically is variable and does not persist for a large number of trials. We are trying to see whether it can be strengthened by adding a reward after the flashes. Will anticipatory evoked potentials from the visual cortex be learned if they are rewarded by giving food to a hungry animal? Can the flashes then be omitted and the distinctive rhythm of cortical potentials be made instrumental to securing reward? If so, will the activity producing these potentials have all of the functional properties of a cue producing response, such as a visual image (Miller, 1961a)? I had hoped to have answers for you, but as often happens, the solution to various technical problems has required more time than I anticipated. It is also possible that this will be one of the trails that, instead of leading to a break through the barrier mountains, leads into a box canyon.

What Determines the Effective Point of Reinforcement in a Temporal Sequence?

To summarize our position so far, we have succeeded in securing a clear-cut demonstration of the effects of drive on learning, but have failed to solve a second problem and to complete a related third one. Let us now turn to a fourth problem. At what point in a temporal sequence does reward occur?

Experiments by Thorndike (1933) purported to demonstrate a bidirectional gradient of reinforcement affecting acts occurring both before and after the reward. Probable sources of artifact in his data were discovered and his interpretation was seriously questioned (Jenkins & Sheffield, 1946). Looking for a simpler, more direct, test, one of my students, Mohammed Nagaty (1951), trained hungry rats some years ago to press a bar as soon as it was inserted. Next he habituated them to receive a pellet immediately before, as well as immediately after, pressing the bar. Then he found that rats with only the pellet after pressing omitted, extinguished at the same rate as those with the pellet

omitted both before and after pressing the bar. These results, and various controls, showed that the pellet before pressing the bar was not an effective reward. But under these conditions some of the food probably still was being chewed and swallowed, the taste lingered in the mouth, and food certainly was entering the stomach and being digested after the bar was pressed. In short, part of the chain of events of food ingestion and digestion followed pressing the bar. Why did these later events in the chain have no rewarding effect?

In a recent attempt to answer this question, David Egger and I (1962) advanced the hypothesis that reward occurs primarily at the point at which new information is delivered. Normally, delivery of food to the cup, and certainly food in the mouth, invariably means that it can be chewed, tasted, swallowed, will reach the stomach, and be digested. Therefore, feedback from these subsequent links in the sequence conveys no new information; it is completely redundant. According to our hypothesis, in Nagaty's experiment all of the new information, and hence the reward, came when the food was delivered.

In order to test this hypothesis, we worked on the learning of secondary reinforcement. We chose the learning of secondary reinforcement instead of the learning of a movement, since it is easier to control the interval between a cue and reward than it is the timing of a movement made by an animal. Our specific hypothesis was that the secondary reinforcement value of a cue is a function of its information value.

Figure 6 summarizes the experimental situation. Look at the diagram next to the bottom labeled "redundant." The first single pellet always predicts the delivery, 2 seconds later, of the trio of pellets. This is analogous to delivery of food predicting the taste, chewing, swallowing, and entry of food into the stomach. Thus, although the intervening stimulus is followed by additional pellets, it is redundant.

In the top diagram of simple conditioning, which represents the usual situation for learning secondary reinforcement, the stimulus is not redundant because there is no other way of predicting the trio of pellets.

But is there any other way of rendering the stimulus informative, while still having it always preceded by a pellet in order to control for any possible inhibitory aftereffect of the first bit of

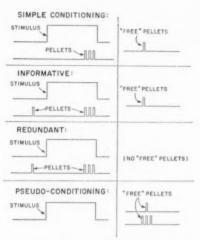


Fig. 6. Diagrammatic representation of the conditions in the first experiment on secondary reinforcement as a function of the information value of the CS.

reward? Suppose we present unpredictably between trials a number of single free pellets, as is indicated in the diagram next to the top, labeled "informative." Then the stimulus is no longer redundant: it is a more reliable predictor of the trio of pellets than is the single pellet. From our hypothesis, we predict that with such a group the stimulus should become a stronger secondary reinforcer than it will in the redundant group given exactly the same treatment in all other respects, but without the additional presentation of some free pellets not followed by the trio of pellets.

Finally, the bottom diagram represents a control for pseudoconditioning in which presentations of the stimulus and the pellets never were paired.

In order to achieve the most sensitive test for secondary reinforcement, we first trained rats to press a bar for pellets, then extinguished them by disconnecting the pellet feeder mechanism, and finally gave them test trials during which every third press delivered the stimulus, but no pellets. Thus the measure of secondary reinforcement was relearning after extinction and is shown by the amount of bar pressing for the stimulus in excess of that shown by the pseudoconditioning, control group.

Figure 7 presents the results. You can see that the informative group did as well as the group with the conventional simple conditioning procedure. The pellet of food a half-second before the stimulus had no obvious inhibitory aftereffect.

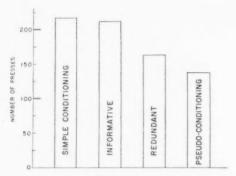


Fig. 7. Food administered immediately before a CS does not interfere with the acquisition of secondary reinforcement, provided the stimulus is an informative predictor of additional food, but does produce a substantial reduction if it makes the CS redundant.

Furthermore, as demanded by our hypothesis, the informative group performed significantly better than the redundant one.

Figures 8 summarizes the design of a similar experiment on the same problem. Since Stimulus 1 always precedes Stimulus 2, the latter is redundant and should acquire less secondary reinforcement value, even though it always precedes food. But there is a way to make S_2 informative. Present S_1 unpredictably a number of times without either S_2 or food. Then S_2 is a more reliable predictor of food than S_1 and is no longer redundant. From our hypothesis we predict that with a group given such training S_2 will be a stronger reinforcer than it will in a group given exactly the same number of identical pairings of S_1 plus S_2 with food, but without the additional presentations of S_1 alone.

Figure 9 presents the results of such an experiment (Egger & Miller, 1962). The ordinate is the

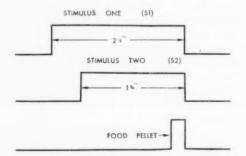


Fig. 8. Design of stimulus sequence used in second experiment on secondary reinforcement as a function of the information value of the CS.

number of bar presses, followed by S_2 as a secondary reinforcer for relearning after experimental extinction. You can see that there were more bar presses for S_2 under the informative than under the redundant conditions. The results of this second experiment also are in line with the information hypothesis.²

But it is quite possible to interpret these results at a different level of analysis, using the drive-reduction hypothesis, which I have found it extremely fruitful to investigate, although I am not at all certain that it is true. According to the strong form of the drive-reduction hypothesis, the secondary reinforcer must produce a reduction in that part of the drive which can be modified by

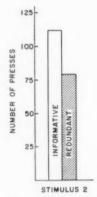


Fig. 9. Results of a second experiment showing that a cue is a stronger secondary reinforcer when it is informative.

learning. Figure 10 presents a diagram of the theoretical analysis. On the left-hand side of this diagram you can see that, if most of the learnable drive already has been reduced by S₁, little drive-reduction remains to be conditioned to S₂. On the other hand, if S₁ often fails to predict food, much of the conditioned drive-reduction to it should be extinguished. Hence, as is illustrated on the right-hand side of the diagram, more of the drive-reduction should occur to, and be conditioned to, S₂.

As you can see from the diagram, this type of an analysis demands that, if the secondary reinforcing value of our hitherto neglected stimulus, S_1 ,

² Since the measure was the ability of the cue to substitute for food in inducing recovery from experimental extinction, only the difference between the informative and redundant condition is relevant; the performance under the redundant condition may have represented disinhibition or spontaneous recovery.

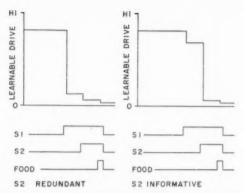


Fig. 10. Diagram showing how the difference in acquisition under the redundant and informative conditions might be explained by the drive-reduction hypothesis of reinforcement.

is tested, it should be greater under the conditions on the left-hand side when it is the reliable predictor (making S_2 redundant) than under those on the right-hand side when it is an unreliable predictor (making S_2 informative). Figure 11 shows that this is indeed the case.

Although the preceding experiment is in line with the deduction made by applying the drive-reduction hypothesis, it would be much more satisfying if we could test the hypothesis in this and in other situations by some more direct, independent measure of the moment-to-moment level of the drive. The need for such a measure in this and in many other experiments is one of the things that has motivated me to explore physiological techniques. My original hope was that, if the neural centers controlling hunger and satiation could be located, it might be

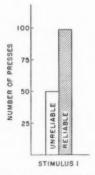


Fig. 11. Confirmation of the prediction based on the theoretical analysis summarized in Figure 10. (Stimulus 1 is a stronger secondary reinforcer when it is a reliable than when it is an unreliable predictor.)

possible to use direct recordings from such centers as a measure of drive. While I am less optimistic about this than when I started, the experimental program initiated by this hope has produced many interesting results.

Experiments on Sensory Feedback from the Mouth and Stomach

Before investigating the brain, however, I worked on some more peripheral mechanisms: the sensory feedback from the mouth and the stomach which I had speculated might be sources of reinforcement in puzzling over the results of Nagaty's experiment. Please fasten your seat belts while I summarize this old work quickly, in order to give the background for some new experiments.

If drive-reduction is the basis of reward, it is obvious that it must occur promptly after the food is received, or else it will be too late to reinforce the responses leading to food. Therefore, the reduction in hunger must occur long before digestion and absorption have restored the cellular deficit. In order to study the effect on hunger of feedback from various links in the chain between the eating and absorption of food, Martin Kohn and I spent the better part of a year trying to develop a simple fistula through which food could be injected directly into the stomach of the rat. After trying many different techniques, we ended up with a great respect for the rat's incredible ability to extrude various foreign devices from his body even though these were held in by flanges which seemed to make such extrusion impossible. Fortunately, we eventually heard that Evelyn K. Anderson of the National Institutes of Health had developed a stomach fistula for the rat. Now that various workers in our laboratory have made a few minor improvements of their own, this technique, which originally gave us so much trouble, can be taught to a good undergraduate student in a couple of days. Our experience in this particular case is representative of what often occurs in the development of new techniques. They are extremely difficult before certain problems are solved and quite easy afterwards.

Experiments by Kohn (1951), Berkun, Marion Kessen, and myself (1952) showed that food injected directly into the stomach produced a prompt reduction in hunger, and taken normally by mouth produced an even greater reduction. Similarly, Woodrow, Sampliner and I (Miller, Sampliner, &

Woodrow, 1957) found that water injected directly into the stomach produced a prompt reduction in thirst, but water taken normally by mouth produced an even greater reduction. With each of these drives the same results were secured by two different techniques for measuring drive: volume of food or water consumed, and rate of working for food or water by pressing a bar on a variable-interval schedule. Thus we were confident of the results which showed that the drive was regulated by immediate feedback from both the stomach and the mouth (Miller, 1957a). These prompt effects avoided the delay that would have been embarrassing to the drive-reduction hypothesis.

Meanwhile, Sheffield and Roby (1950) had shown that a nonnutritive but sweet substance, namely saccharine, could act as a reward for hungry animals even though all of it was excreted, so that it served no nutritional need. This finding has been used as an argument against the strong form of the drive-reduction hypothesis. But Edward Murray, Warren W. Roberts, and I showed that saccharine taken by mouth reduces the amount of food consumed immediately thereafter, which suggests that it temporarily reduces hunger as would be demanded by the drive-reduction hypothesis, and supplies additional evidence for an oral feedback controlling hunger (Miller, 1957a).

Recently, a student of mine, Derek Hendry, has observed that thirsty rats will lick at a cooling stream of air, and then has found that they will learn to press a bar to turn on the air briefly. Since the air increased evaporation, and hence the water deficit, he thought that this was evidence against the drive-reduction hypothesis. However, when at my suggestion he made the test for the effect of licking air on thirst, he found that a period of licking air not only reduced the immediately subsequent consumption of water, but also caused thirsty rats to reduce their rate of working for water by pressing a bar on a variable-interval schedule. Thus it appears that the feedback from the mouth produced by licking a jet of air may temporarily somewhat reduce thirst (Hendry & Rasche, 1961).

But to return to our original story, if food injected directly into the stomach produces a prompt reduction in hunger, it should serve as a reward. And indeed Marion Kessen and I (Miller & Kessen, 1952) found that rats would learn to turn to the side of the T maze in which they received milk

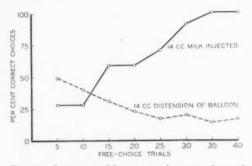


Fig. 12. One group of hungry rats learns to choose the side of a T maze where their stomachs are distended by milk injected directly via fistula; another group learns to avoid the side where their stomachs are distended by injection of liquid into a balloon. (From Miller, 1957a)

via fistula directly into the stomach rather than isotonic saline.

Soon after that, we found that inflating a balloon in the rat's stomach would reduce the rate of bar pressing for food (Miller, 1955). We concluded that stomach distension probably reduced hunger. In that case, stomach distension should serve as a reward. But when we made the test, as Figure 12 shows, we found that the animals learned to avoid the side where their stomachs were distended by the balloon, in contrast to learning to go to the side where the stomach was distended by milk. This was nice in that the behavioral test showed up a qualitative difference, which otherwise might not have been suspected. But it complicated the theoretical picture (Miller, 1957a).

Design to Test Intervening Variable

Now for some time I had been advocating and also practicing the use of a variety of behavioral tests to cross-check each conclusion in order to avoid being mislead by side-effects which might be specific to a given type of test (Miller & Barry, 1960). Indeed, I insistently pointed out (1959) that an intervening variable is meaningful only when one secures the expected type of agreement in experiments designed to use a variety of techniques to manipulate the assumed intervening variable and a variety of techniques for measuring it.

Recently, I have completed an experiment of this type to compare the effects of three methods of manipulating thirst—water by mouth, by fistula, and in a stomach balloon—on three different measures of thirst: the volume drunk immediately after-

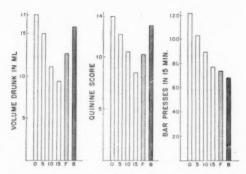


Fig. 13. Comparison of three different measures of the effect on thirst of three different types of pretreatment: Water drunk normally by mouth (0, 5, 10, or 15 milliliters); 15 milliliters of water injected via stomach fistula (F); 15 milliliters of water injected into stomach balloon (B). (The patterns of results measured by volume consumed or by quinine score are highly similar; the results measured by rate of bar pressing are different.)

wards, the amount of quinine in the water required to stop drinking, and the rate of working at pressing a bar rewarded by water on a variable-interval schedule.

Figure 13 presents the results of this experiment. Let us look at the two diagrams to the left and in the center showing results for measuring thirst by the volume of water drunk and by the amount of quinine required to stop drinking. In the open bars you can see that prefeeding increasing amounts of water—0, 5, 10 or 15 milliliters—produced progressive decrements in the scores on both tests. These decrements serve as a basis for calibrating the other effects.

Looking at the bar with single crosshatching and labeled F, you can see that using the fistula to inject 15 milliliters of water directly into the stomach produced an effect roughly comparable to that of drinking 10 milliliters normally by mouth. Allowing for sampling errors, the effects are roughly comparable in both the left and middle diagrams. Now looking at the double crosshatched bars labeled D, you can see that injecting into the balloon 15 milliliters of water to distend the stomach produced less effect than drinking 5 cubic centimeters normally by mouth. The effect is highly similar in both the left and middle diagrams. The general picture of agreement in these two diagrams is what might be expected if the different experimental operationswater via mouth, fistula, and in the balloon-all were manipulating a single intervening variable,

namely, thirst, which was being measured by both of the tests: volume of water drunk, and amount of quinine required to stop drinking.

Now, shifting to the right-hand figure for results of the test which used rate of bar pressing as a measure, you can see that the effect of prefeeding various amounts of water was much like that in the preceding tests. The effect of injecting water by fistula was somewhat off. But the effect of inflating the balloon was grossly different. Instead of being almost negligible, less than drinking 5 cubic centimeters of water by mouth, it was greater than that of drinking 15 cubic centimeters of water by mouth.

From this result we draw two conclusions: First, in my previous work by relying on bar pressing as the sole test, I probably had been trapped into greatly overestimating the reduction in drive, if any, produced by inflation of a balloon in the stomach. Second, when the bar pressing test is also included, the overall results cannot be explained by the asumption of a single intervening variable, since the results of all three tests are not perfectly correlated, as they would have to be if they were all pure measures of the same unitary thing, namely, strength of thirst. Perhaps the bar pressing test is especially susceptible to distraction, pain, and nausea, possibly produced by inflating the balloon in the stomach. If so, this pain or nausea would be a second intervening variable.

In any event, the need for this particular type of experimental design is obvious. As I have pointed out before (Miller, 1957b), we have great confidence in the electron as an intervening variable, because electrons produced by a great variety of experimental operations: rubbing a cat's fur against amber, heating a metal in a vacuum, putting zinc and carbon in acid, or cutting a magnetic field with a wire, all have exactly the same charge when measured by a variety of techniques—repelling like charges on a droplet of oil, depositing silver in an electroplating bath, or creating magnetic lines of force when they move. It is this kind of agreement which gives us confidence.

In the behavioral sciences we need to make much more use of such cross-checking of hypotheses. With sufficient ingenuity, it is possible, not only in simple situations of the kind I have been describing, but also in dealing with many other problems. For example, in the area of personality development, certain clinical observations on children can be checked against controlled experiments on animals and also against anthropological observations on the effects of different conditions of child rearing in other cultures.

BRAIN ELECTROLYTES AND THIRST

To recapitulate briefly, I have described evidence that drive is important for learning. I have shown that the point in a temporal sequence, at which maximum reward effect is concentrated, can be described in terms of information theory and possibly explained in terms of the drive-reduction hypothesis of reinforcement. I have shown that the drives of both hunger and thirst are promptly reduced by feedback from both the mouth and the stomach. Now let me carry on the main story a bit further.

For some time, it has been believed that there are osmoreceptors in the brain which could be an additional mechanism involved in controlling thirst. A few years ago, Andersson (1953), in Stockholm, added convincing evidence by showing that minute injections in the region of the third ventricle of a satiated goat's brain, would elicit drinking if the solution injected (2% NaCl) had slightly more effective osmotic pressure than is normal for body fluids. My students and I confirmed this in the cat, and in addition showed that minute injections of pure water, which has less osmotic pressure than the body fluids, would have the opposite effect of reducing thirst. For both the increase and the reduction, we got the same results with two different measures: volume of water consumed and rate of performing a learned response to get water on a variable-interval schedule (Miller, 1961b). Thus we see that, in addition to being controlled by feedbacks from the mouth and stomach, thirst is controlled by receptors in the brain which respond to the state of the body fluid around them.

Still more recently a student of mine, Donald Novin (1962), has devised an ingenious technique for recording electrolyte concentration in the body fluids of normal rats free to move around in a small chamber. This is significant to our story because electrolyte concentration in the body is almost entirely due to the concentration of NaCl which in turn determines the effective osmotic pressure to which the "osmoreceptors" in the brain presumably respond.

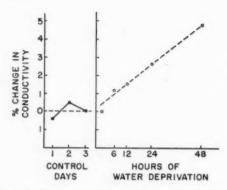


Fig. 14. Electrolyte concentration, as measured by conductivity, increases with hours of water deprivation. (From Novin, 1962)

Two platinum-black electrodes are chronically implanted in the rat's brain so that they can be connected to flexible leads. Since the electrolyte concentration of various body fluids presumably is the same, the placement in the brain is for convenience, rather than having crucial significance. With suitable bridge circuits, the resistance between these two electrodes is used to measure electrolyte concentration. Let us see some of the results which he has secured in our laboratory.

Figure 14 shows the results of water deprivation. As the animal becomes dehydrated, we expect the concentration of electrolytes (primarily salt) in his blood to increase, so that the conductivity should increase. We can see that this is exactly what occurred.

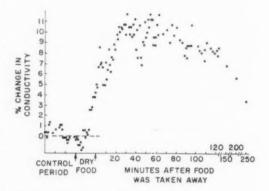


Fig. 15. Feeding dry food to a hungry rat increases electrolyte concentration, as measured by conductivity, which then decreases during the subsequent interval without access to water. (From Novin, 1962)

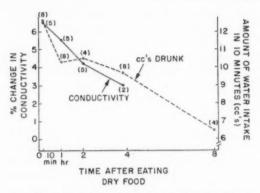


Fig. 16. After thirst is induced by feeding dry food to hungry rats, longer rest intervals without water produce a great reduction in thirst as measured either by conductivity or by volume of water drunk. (Separate tests are given at the end of each interval.) (From Novin, 1962)

If a hungry animal is fed dry food, it makes him thirsty. Figure 15 shows that this procedure also increases the electrolyte concentration as measured by conductivity. But looking at the right-hand side of the figure, we see a peculiar thing. Several hours after eating dry food, and without any opportunity to drink, the conductivity begins going down. According to this, the animal should be less thirsty even though it is longer since his last drink. Figure 16 shows the results of separate tests for thirst, administered at different times after dry food without water. You can see that the rats do indeed drink less after the longer times.

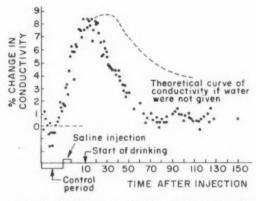


Fig. 17. An intravenous injection of hypertonic saline (1 milliliter of 12%) into a satiated rat increases thirst as measured by conductivity, so that when water is introduced, the rat starts drinking which restores conductivity to the baseline level for satiation. (From Novin, 1962)

There is a striking parallelism between the curves of conductivity as a measure of electrolyte concentration and water-intake as a measure of thirst.

Figure 17 shows that an intervenous injection of a hypertonic saline (1 milliliter of 12%) solution into a satiated rat increases conductivity as would be expected, and when water is given after 10 minutes, causes him to start drinking as an indication of thirst. Drinking produces a drop in conductivity, which begins to occur rapidly enough so that it could be one of the factors involved in the eventual stopping of drinking.

The dotted theoretical curve of conductivity if water were not given is based on results of another experiment; the drop in it is produced by the excretion of salt by the kidneys. You should note for future reference that the empirical curve of conductivity comes back approximately to the same baseline level it had before the hypertonic saline was injected.

Looking at one type of experimental manipulation at a time, we have seen good qualitative agreement between the two measures: electrical conductivity and the volume of water drunk. If electrolyte concentration is the only intervening variable involved, we must expect a perfect positive correlation between these measures when the effects of different manipulations are compared. In order to test this, Novin performed an experiment, comparing the effects of normal deprivation and of intervenous injection of saline upon both measures.

Figure 18 shows the results. Looking to the left of the dotted line, we see that the water deprivation used produced a slightly *lower* level of conductivity than did the saline injection. But on the right-hand side of the dotted line, we see that the water deprivation induced considerably *more* drinking than did the saline injection. This is not a perfect positive correlation; in fact, it is a negative one. Thus the results show that electrolyte concentration, which produces effective osmotic pressure, cannot be the sole factor involved.

Additional evidence of a discrepancy comes from the effect of drinking on conductivity. In Figure 17 we have seen that, after an injection of saline, drinking brings conductivity back approximately to the base-line of the preceding satiated state. Figure 19 shows that, after normal deprivation, drinking brings conductivity far below the satiation baseline level depicted by the solid horizontal line out from the little square on the ordinate. This

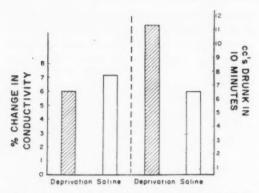


Fig. 18. An injection of hypertonic saline which produces a greater increase in conductivity than does a period of water deprivation, elicits 'less drinking than does the deprivation. Therefore, the change in effective osmotic pressure, measured by conductivity, cannot be the sole factor involved in thirst. (From Novin, 1962)

is the kind of result that would be expected if the animal is drinking to restore a water deficit, rather than to bring electrolyte concentration back to a given level. Perhaps the so-called osmoreceptors are reacting not solely to effective osmotic pressure, but to total amount of dehydration. Perhaps there are some other receptors that react to the volume

of body fluid. At least we know that electrolyte concentration cannot be the whole story.

Again we see the advantage of testing an intervening variable with a design comparing the effects of at least two different experimental manipulations upon at least two different measures.

Unsuccessful Tests on Parabiotic Rats

There has been a good deal of speculation that, in addition to the osmoreceptors, the brain contains receptors which respond to a hunger hormone, or the state of nutrients in the blood. In an attempt to locate some such humoral factor, Angus A. Campbell worked with me on parabiotic rats, or in other words, surgically created Siamese twins. But an extensive amount of labor failed to secure any evidence for a hunger hormone, or indeed for the transfer of appreciable amounts of nutrients across the parabiotic barrier. Since then I have learned that Teitelbaum also has secured somewhat similar negative results with such rats.³ Perhaps

³ Our observation was that having a well-fed partner did not appreciably increase the starvation time of the unfed one or increase the food consumption of the fed one. In a personal communication, P. Teitelbaum has told us that, in a similar experiment, the food intake of the

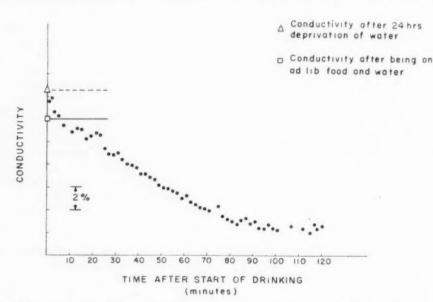


Fig. 19. Ad lib. drinking following water deprivation reduces conductivity far below the normal predeprivation base level. (Represented by the little solid line out from the hollow square. Contrast this with the effect of drinking in duced by the hypertonic injection, as presented in Figure 17. (From Novin, 1962)

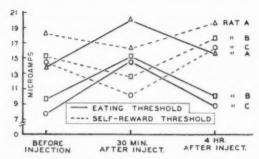


Fig. 20. An injection of dexedrine (2 mg/k) raises the threshold for eating, but lowers it for self-reward. (Twenty-five tests were given to each rat at each point.) (Experiments by E. E. Coons from Miller, 1960)

we need some other type of preparation to study this problem.

Behavioral Analysis of Effects of Electrical Stimulation of the "Feeding Area" of the Brain

Now let us turn to a somewhat different approach to the problem. It has been known for some time that electrical stimulation of certain areas of the hypothalamus will cause a satiated animal to eat. Ted Coons and I have devised a series of behavioral tests to show that such stimulation does not merely arouse a gnawing reflex, but has many of the properties of normal hunger. Since these results have been summarized elsewhere (Miller, 1960), I shall merely mention them briefly as background for some new work. Stimulation of this area will elicit not only eating, but also will cause a satiated animal to perform learned responses reinforced by food. Such stimulation will cause a satiated rat to bite food, but not to lap up pure water. However, the rat will lap up sugar water or milk. Therefore the response is not defined primarily by the motor movements, but rather by a sensory feedback, namely, the taste of food. As would be expected from the drive-reduction hypothesis of reinforcement, turning off such stimulation will act as a reward to produce the learning of a T maze. But paradoxically, turning on such stimulation also will serve as a reward. This result is contrary to the prediction from the drive-reduction hypothesis of reinforcement.

fed member of the pair did not increase during the first several days, although it perhaps may have increased approximately 24 hours before the unfed member died of starvation.

In Figure 20 the center points of the solid lines show that the appetite reducing drug, dexedrine, increases the threshold (in microamperes) for eliciting eating. But as the center points of the dotted lines show, the same injection of the same drug reduces the threshold for bar pressing rewarded by a brief burst of stimulation. Both results are highly reliable for each of the three rats tested. Since the same drug has opposite effects on the two thresholds, perhaps the eating and rewarding effects are produced by different systems which are indiscriminately stimulated by the same electric current. If so, predictions from the drive-reduction hypothesis must be held in abeyance.

A Chemical Code in the Brain?

Another one of my students, Peter Grossman (1961), recently has devised a double cannula technique for stimulating the same "feeding area" of the rat's brain with minute amounts of crystalline substances. He has found that minute amounts of the adrenergic substances, adrenalin or noradrenalin, will cause satiated rats to eat and also to perform a learned response rewarded by food. By contrast, stimulation of the same area via the same cannula, by minute amounts of the cholinergic substances, acetylcholine or carbachol, will cause satiated rats to drink and also to perform learned responses rewarded by water.

Various control tests with other substances rule out Ph, vasoconstriction or vasodilation, and osmotic pressure as the primary sources of these effects. More convincing still is the fact that an intraperitoneal injection of ethoxybutamoxane, which is an adrenergic blocking agent, practically eliminates the eating elicited by inserting the adrenergic noradrenalin into the brain, while leaving the drinking elicited by the cholinergic carbachol, practically unaffected. Similarly, an intraperitoneal injection of the cholinergic blocking agent, atropine sulfate, leaves the eating to centrally administered noradrenalin relatively unaffected, while practically eliminating the drinking to carbachol. These effects of the blocking agents are an elegant control to show that the drugs elicit eating and drinking via their adrenergic and cholinergic effects, respectively.

In rats with a cannula into this area of the hypothalamus, we apparently have a good method of investigating new compounds suspected to have central, adrenergic, or cholinergic effects, or to function as central blocking agents.

But are the effects we have just described involved in normal hunger and thirst? That they probably are is indicated by the fact that administering the appropriate blocking agent, either peripherally by intraperitoneal injection or centrally via the cannula into the brain, produced the appropriate differential effects on rats made hungry or thirsty by deprivation of food or water. The effects of the blocking agents on normal hunger and thirst are somewhat less complete than those on eating and drinking elicited centrally, but they are unmistakable. The adrenergic blocking agent produces a reliably greater decrement in food consumption than does the cholinergic one; the cholinergic blocking agent produces a reliably greater decrement in water consumption than does the adrenergic one. Thus adrenergic and cholinergic effects seem to be involved in normal hunger and thirst, respectively. In short, this evidence, along with that of other more purely physiological studies, suggests a chemical code in the brain.

Basis of Antagonism between Hunger and Thirst

The effects we have just described give us an opportunity to answer a theoretically interesting question. It is known that water deprived animals stop eating dry food. Is this because the drive of thirst is centrally incompatible with the drive of hunger, or because bodily dehydration interferes with peripheral aspects of the hunger mechanism—for example, a dry mouth making it difficult to eat dry food?

Similarly, food deprived animals drink less water. Is this because the mechanism of the hunger drive is antagonistic to thirst or merely because animals not eating dry food do not require as much water?

In an attempt to answer these questions, Grossman secured the results shown in Figure 21. In the upper graph, you can see that direct stimulation of the hypothalamus by norepinephrine increased the food intake of normally hungry rats exposed only to food, while stimulation by carbachol markedly decreased it. Similarly, the lower graph shows that carbachol increased the drinking of normally thirsty rats exposed only to water, while norepinephrine decreased it. These results strongly suggest that there is some central way,

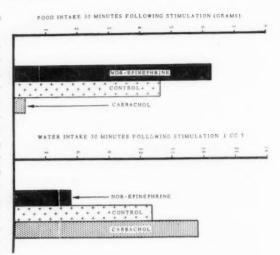


Fig. 21. When introduced into the "feeding area" of the lateral hypothalamus, minute amounts of adrenergic nor-epinephrine potentiate food intake induced by 24-hour deprivation, while cholinergic stimulation by carbachol interferes with food consumption. The same substances via the same cannula have opposite effects in similar tests for water consumption. (From Grossman, 1961)

analogous to reciprocal innervation, in which the drive mechanisms of hunger and thirst tend to inhibit each other.

These discoveries are being followed up in our laboratory. We have investigated the effects of injecting minute quantities of blood serum from hungry and satiated animals directly into the brain. Our preliminary results are negative. We are investigating the effects of other hormones and drugs, both in the feeding area and in the ventromedial nucleus, which is believed to be a satiation area. We are studying the effects of a bacterial toxin which seems to interfere with drinking (Dubos, 1961), and also we find with eating. We are testing the effects of adrenergic and cholinergic blocking agents on direct electrical stimulation of the brain. We are confronted with many more interesting problems than there possibly is time to investigate.

A New Conception of the Brain

The work that I have just described on drive and reward as well as the work on other topics by our Past President, Donald Hebb (1958), and by other laboratories in a number of nations, is opening up a new conception of the brain.4 We no longer view the brain as merely an enormously complicated telephone switchboard which is passive unless excited from without. The brain is an active organ which exerts considerable control over its own sensory input. The brain is a device for sorting, processing, and analyzing information. The brain contains sense organs which respond to states of the interval environment, such as osmotic pressure, temperature, and many others. The brain is a gland which secretes chemical messengers, and it also responds to such messengers, as well as to various types of feedback, both central and peripheral. A combination of behavioral and physiological techniques is increasing our understanding of these processes and their significance for psychology.

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REPORT OF THE EXECUTIVE OFFICER: 1961

JOHN G. DARLEY

American Psychological Association

AST year, on this same occasion, I spoke of my conviction that psychologists share a common fate, in spite of the centrifugal forces that may beset an organization grown so large as ours and one encompassing so many diverse interests. This fate will ultimately reflect, in some major degree, the perception of our science and our profession by the society we serve and in which we are embedded.

None of us can claim adequate understanding of what psychology means to, or how it is perceived by, the many nonpsychological segments of society with which it deals. I rather suspect, furthermore, that within the APA we ourselves have no single and all-encompassing picture of what psychology now is or what it may become.

But we can identify some of the audiences we must reach if we are to create a perception of our field that has viability and that will permit us to perform with effectiveness, with dignity, and with some feeling of social worth. Let me characterize these audiences.

We must speak to high school students for two major reasons. Approximately 60% of them do not go on to college; for this number, the high school years represent the last significant opportunity to gain an understanding of the many disciplines presently comprising the sciences. For the 40% who do go on to college, an appropriate understanding of psychology lays the foundation either for an occupational choice in this area or for an informed attitude toward our field, in conjunction with other vocational choices.

We must continue to speak to college students, and with greater effectiveness than may be true at present. For in these years we compete for our share of the talents and creativity of able young people, to carry them forward into graduate study or to shape their understanding of psychology as they choose other major fields and professions.

This year, as last year, partial evidence of psychology's appeal to college students may be seen in the number of National Science Foundation and Woodrow Wilson fellowship awards for graduate study: 44 out of 1,537 awards in the NSF regular fellowship competition went to psychology students, 42 out of 1,100 in the NSF cooperative program, and 49 out of 1,292 in the Woodrow Wilson program. Thus, 135 out of 3,929 fellowship awards in these three competitions represent psychology's share; the percentage is about the same as last year's—slightly in excess of 3%.

Additionally, evidence available from the American Council on Education suggests that psychology, against the index year of 1955, may be losing ground proportionately as an undergraduate major field, even though general enrollment increases are reflected in increases in absolute numbers of psychology undergraduate majors.

Admittedly other sources of financial support for graduate study in psychology exist, and graduate work in psychology may be undertaken without a full undergraduate major therein. But I find little cause for satisfaction in the number of fellowship awards cited above or in the evidence on numbers of undergraduate majors. If we fail in creating an adequate perception of psychology among college students, we may mortgage our future beyond redemption, considering the current demands for a great variety of trained psychologists.

We must continue to speak to scientists and scholars in other disciplines. No science today is an island unto itself; advances in knowledge are often most exciting at the interface fields. Problems old and intractable within one discipline may be illuminated and clarified by the concepts or methods of another discipline. On more pragmatic grounds, scientists and scholars in other fields must be well disposed towards psychology if we are to be permitted to retain the support we need to move forward. I call to your attention the most recent scholarly treatment of psychology, The Servants of Power, by the historian Loren Baritz; here again is the old accusation of psychology as the managerial science, for hire in the service of an elite. Raymond Bauer's review in the August 1961 Contemporary Psychology deals at greater

length with this issue. With respect to the present power position of the physical and biological sciences in our society, I fear that the contributions of psychology are not clearly understood nor its wonders self-evident.

And finally we must speak in a way to be clearly understood by the decision makers in our national society, primarily in the area of government. It is increasingly apparent that we share another common fate: we shall be blown off the same earth as nonpsychologists in the event that great international forces come into ultimate conflict. Physicists, engineers, historians, and economists, among others, bring forth analyses and solutions for problems of international conflict; but until recently. psychology's voice has been somewhat muted. Psychology, under the duress of great national needs, has gone through the same process of secularization and increased participation in governmental affairs as have other disciplines. But psychology's voice in broad policy determinations is not as clear nor is its message as self-assured as the voices of other scientists and scholars. The message of psychology must be included at many more decision points, if our science and our wisdom are to have impact.

If these are some of the major audiences, what are the voices of psychology? Where are they heard? Events of the past year have highlighted this problem and have focused attention on the influence processes and networks in psychology. One major task of the APA Central Office is to trace out, understand, and—where possible or necessary—coordinate these networks and influence efforts, and participate in them.

A significant part of our public image emerges in day-to-day transactions characteristic of all sciences and professions. Our scientific journals, our regional and annual meetings, the activities of our state and local associations: these institutional behaviors sum up and stand for our behaviors as individual psychologists within the limits of our training, our interests, and our special skills. They partially determine the intelligent layman's view of our field. But this is not an organized nor systematic influence network. It is primarily psychology going about its daily business. On this broad base our public image ultimately rests, however.

I am inviting your attention to the influence processes and networks in which the Central Office of the Association becomes involved, although I recognize that American psychology and the American Psychological Association are by no means coterminous nor isomorphic in the presentation of images of the field. But the very organization and location of your Central Office involves the implicit assumption of exertion of influence, and coordination of influence efforts.

The organized influence structure for psychology first involves governmental agencies and programs having continuity, policy functions, and fiscal authority. Thus one set of voices for psychology will reside in the corps of psychologists on the permanent staffs of government agencies. In the main able and dedicated individuals, their behavior and convictions give shape to the perception of our field. and to its growth. Beyond the structure of government itself, and characteristic of the American scene, there are, next, voluntary agencies and associations on whose staffs psychologists are found in positions of influence. A third major aspect of organized influence operations is seen in the psychologist in the role of short-term governmental consultant, advising on research allocations, agency policy, or agency organization.

I have purposely omitted from this classification scheme the delegates officially designated and accredited by our Association to various other societies and organizations such as American Association for the Advancement of Science, National Research Council, Social Science Research Council, and comparable groups. These representatives report to us annually, as may be seen in the agenda for the Council of Representatives and we know what is going on. I have also omitted the influence effects of our friends, and enemies, from other disciplines, whose position statements about psychology we not infrequently see in Washington. On occasion, I have wished, this past year, that we had fewer friends and more enemies. The expectations for psychology, by friendly nonpsychologists, are somewhat high.

My colleagues on various APA boards and committees, with whom this influence network has been discussed, are understandably concerned by my reference to psychology's influence peddlers. Yet in a nonpejorative sense, it is important to consider the effects for psychology, short-term and long-term, of the power structure that can shape its development. Often a particular influence

source has an immediacy and a range that are quickly evident.

Several characteristics of the organized influence network deserve comment. It numbers many individuals. Its membership, especially among consultants, undergoes periodic change. It speaks segmentally to specific areas of psychology, but not for psychology as a whole. It tends to be uncoordinated; the connecting communication channels across the various radial lines are few in number. While each of its efforts and thrusts are relevant to psychology, the sum of its efforts may place demands on psychology that cannot be fully met by our present production of trained manpower. It does not set priorities on its influence attempts. These characteristics are of course not unique to psychology: they hold true for any science that has attained organizational power in national affairs.

Against this background of the interplay of forces affecting the perception of psychology, I should like to call to your attention some of the activities of the past year. Keep in mind the audiences reached in each case and the messages transmitted by psychology's many voices.

The work of the Committee on Communication with High School Teachers, now under the Education and Training Board, has moved on several fronts: collection of information on the teaching of psychology in high schools, coordination with the state associations active in improving high school teaching in this area, preparation and distribution of material on psychology for use in high schools, and training high school teachers in an understanding of content in psychology.

At the invitation of the American Institute of Biological Sciences, we have arranged for a member of this committee, a member of BSA, and a member of E&TB to prepare written reviews of three unified biology curricular plans being presently introduced in secondary schools, with a view to improving the presentation of psychology as part of high school biology.

At the invitation of the American Council of Learned Societies, we have arranged for a senior member of the Association to prepare a statement on psychology as part of an integrated social science curriculum in high schools.

With an NSF grant, plans are now under way for the preparation of a career brochure on psychology, for use in high school and early college years.

With another NSF grant and in collaboration with the National Educational Television Research Center, production starts this fall on a series of up to 10 half-hour films on scientific fields of psychology, for use on educational television channels and other noncommercial outlets. This series is aimed at the late high school and early college years, and may also be useful in adult education programs.

The past year witnessed the first full cycle of our visiting scientist program under which psychologists from our leading institutions and research centers visited smaller colleges to work with staff and students in enlarging their understanding of our field. Over 120 such visits were made. Additional NSF funds will permit the plan to continue another year or more. I commend to your attention the report of this program that appeared in the American Psychologist.

The entire scientific community shows increasing concern about common problems of scientific communication and the storage and retrieval of information. This fall we start a study, that will run for at least 2 years, on problems of information exchange in psychology. This research program, supported by NSF funds, parallels similar work under way in physics, biology, and other disciplines. The method and concepts of psychology may bring some illumination to problems common to all sciences.

In collaboration with other health sciences, we continue exploration and planning for a corporate organization to deal with the American Medical Association on problems of scientific and professional development and cooperation. 1962 should witness the establishment of a new administrative structure for this.

As the host country for the 1963 International Congress of Psychology, we are now planning for this event to be held in August 1963 in Washington.

In the arena of science in national and international affairs, science speaks with many voices and often with conflicting messages. This year, for the first time in systematic form, psychologists are preparing statements on our possible scientific contributions for policy consideration by the President's Science Advisory Committee. Working committees of our most able representatives have been active throughout the year. On the stage of public action, this Association should be deeply appreciative of the fact that Nicholas Hobbs has served since last March as Director of Selection for the Peace Corps, established in March 1961 by executive order of the President. If this venture in aid and idealism succeeds, it will in no small part reflect the skill of Hobbs and his colleagues in devising selection methods, on a crash basis, for a new pattern in American diplomacy.

The Committee on Psychology in National and International Affairs has served both as a catalyst and as a focusing mechanism in bringing the psychologist's concerns with peace, arms control, and disarmament to attention within our own field and between our organization and other governmental or voluntary groups. Its members and associates, individually and as a committee, have thrust psychological considerations into the discourse of historians, social scientists, and government officials. I need refer only to some of the writings of Charles Osgood and Urie Bronfenbrenner to illustrate my point.

These events of the past year should be sufficient to sample my concern with the organized influence activities of the APA. They involve many tactics and methods: preparation and review of research proposals, creation and recommendation of panels of competent specialists in various areas of psychology, identification and use of influence groups, maximized communication across psychology's present influence network, exertion of pressure to provide good representation for our field or to silence nonrepresentative voices. The only unequivocal evidence of my presence in the APA Central Office was a 30% increase in our long distance telephone bill in 1960 over 1959.

Where and with what impact these forces and events will affect our image, I leave to a later and better historian. To that same historian will fall the task of assessing the value of psychology's words, ideas, and messages. Since we are caught in the flood tide of current history, I find insufficient time to debate the wisdom of having gone swimming.

PROCEEDINGS OF THE SIXTY-NINTH ANNUAL BUSINESS MEETING OF THE AMERICAN PSYCHOLOGICAL ASSOCIATION, INCORPORATED

September 1 and 5, 1961 New York, New York

REPORT OF THE RECORDING SECRETARY

LAUNOR F. CARTER

System Development Corporation

HE Annual Meeting of the Council of Representatives of the American Psychological Association was called to order at 9:00 A.M., September 1, 1961 by President Neal E. Miller in the Commodore Hotel, New York, New York. The second session convened on September 5. Prior to the Council meeting the Board of Directors met on August 28, 29, and 30; the Board also met intermittently throughout the convention.

The Board of Directors held its Spring Meeting on May 18, 19, and 20, 1961 at the APA Central Office. The minutes of that meeting have been mimeographed and distributed to the Council. To enable members to follow the actions of Council and of the Board during the year, the minutes of the Spring Meeting and of the Annual Meeting are consolidated in this report. Interested members may obtain a separate copy of the minutes of the Spring Meeting of the Board of Directors by directing a request to the APA Central Office.

Four years ago a new organization of the proceedings was adopted; this year's report follows the same order with the following major headings:

- I. Approval of the Annual Report of the Recording Secretary for 1960
- II. ELECTIONS, AWARDS, AND APPOINTMENTS
- III. MEMBERSHIP, AFFILIATIONS, AND RELATED
 MATTERS
- IV. Divisions
- V. ORGANIZATION AND STRUCTURE OF THE APA
- VI. PUBLICATIONS
- VII. ANNUAL CONVENTION
- VIII. EDUCATION AND TRAINING
 - IX. PROFESSIONAL AFFAIRS
 - X. Scientific Affairs
 - XI. INTERNATIONAL RELATIONS
- XII. PUBLIC RELATIONS
- XIII. APA CENTRAL OFFICE

XIV. FINANCIAL MATTERS

XV. REPORTS OF OTHER BOARDS, COMMITTEES, REPRESENTATIVES AND DELEGATES, AND RELATED MATTERS

I. Approval of the Annual Report of the Recording Secretary for 1960

A. Council voted to approve the Annual Report of the Recording Secretary for 1960 as printed in the *American Psychologist*, 1960, **15**, 750–766.

B. The Board of Directors directed Council's attention to the minutes of the meeting of the Board of Directors, May 18-20, 1961, and preceding interim actions, as reported by the Recording Secretary and previously distributed to Council members.

II. ELECTIONS, AWARDS, AND APPOINTMENTS

A. Elections:

 Council voted that the report of the Election Committee be received with thanks. The committee reported that:

a. Charles E. Osgood is the new President-elect.

 The Recording Secretary reported that Council elected Edwin B. Newman as Recording Secretary for 1961–1964.

 The Recording Secretary reported that Council elected Paul M. Fitts and Ross Stagner as members of the Board of Directors for 1961–64.

4. Various board and committee members, chairmen, and representatives were elected by Council, by the several boards, or appointed by the President. The membership of these boards and committees is listed separately following these minutes.

5. Council approved the slate of nominees for election by the American Board of Examiners in

Professional Psychology, Inc., as proposed by ABEPP.

6. The Board reports it voted that in addition to the Annual Report of the Election Committee the Central Office prepare an appropriate form to be distributed to the Council announcing the election of APA officers and new members of the Board of Directors. In addition, separate letters should be sent newly elected officers of the APA, members of the Board of Directors, and members of the Council of Representatives, informing them of their election.

B. Awards: Council voted to receive with thanks the report of the Committee on Scientific Awards. The recipients in 1961 of the APA Awards for Distinguished Scientific Contributions were: Donald O. Hebb, James J. Gibson, and Henry A. Murray.

C. Appointments: The Board reports that it noted the appointments to various ceremonies and functions and directed that reports of such appointments be made in the "News and Notes" department of the American Psychologist but not be included in the Annual Report of the Recording Secretary.

III. MEMBERSHIP, AFFILIATIONS, AND RELATED MATTERS

A. Membership:

Council received the report of the Membership Committee with thanks. It was reported that:

a. The APA was informed of the deaths of the following 71 members during the year:

Charles R. Atwell Blanche Meyer Baker Erna C. Barschak Charles Scott Berry Harry W. Braun Charles A. Coburn Norman Cohen (New York) Kenneth W. Colman Elmer A. K. Culler Margaret Wooster Curti Roland C. Davis William J. Devlin Horace B. English Edward P. Friesen Douglas H. Fryer Arnold Gesell G. I. Giardini

Justin E. Harlow, Jr. J. D. Heilman Dorothy E. Holland Winifred B. Horrocks Carl I. Hovland Harold E. Israel Buford J. Johnson Edward T. Jordan Truman Lee Kelley Gerald F. King Theresa K. Kirby Mydelle Ella Kleist Oliver Lacey Seymour P. Levy Penelope Lewis R. B. Liddy Paul J. Lilly Irving Lorge

D. I. Macht Florence Mateer Selinda McCaulley Lawrence W. Miller Wilford Stanton Miller Horace Leland Millikin Philip H. Mitchell Mary West Monroe Donald Carl Moser Carl Murchison Donald G. Paterson Stuart C. Peterson Minnie Rob Phaup Leonard K. Phillipson Horace D. Pickens David Rapaport Ned Lewis Reglein Suzanne K. Reichard

Benjamin S. Remland Christian Ruckmick Bertram H. Schneider Robert C. Schon Thurman C. Scott Richard Sears Franklin J. Shaw E. Elona Sochor Clement Staff Elizabeth H. Tracv John Vernon Van Rheen Mary C. Van Tuyl Wayland F. Vaughan Samuel Waldfogel Carl J. Warden Wilbur D. West Raymond H. Wheeler Herbert D. Williams

b. 277 resignations were accepted by the Board of Directors, of which 203 were for non-payment of dues:

Nathan R. Adelsohn Paz V. Adriano Francis J. Affleck Harry C. Aichner Stanley I. Alprin Leo Dewey Anderson Verna A. Anderson Eleanor M. Anglin Mary Ann Smith Armstrong Arthur L. Assum Hari Shanker Asthana Charles L. Baldwin Frank W. Banghart Ruth Lynch Barclay Anna V. Bardellini John Winchell Bare Myron F. Barlow Margaret S. Bay Betty E. Bederson Laurence L. Belanger George C. Bellingrath Arthur J. Bennink Gustav Bergmann Harold T. Bevan Luz A. M. Beytagh Duane F. Blackwood Ellen Cohen Bloch Ingrid Bergstrom Borland Nancy Williams Bovee J. W. Bowles Alicia M. Boyd Helen D. Bragdon Richard R. Braun Robert Heywood Brown W. A. Brownell Marne F. H. Bubeck

Hughes L. Buerger Alastair Burnett Robert A. Butler B. Forrest Carroll Mary L. Casey William R. Chambers Kao-Liang Chow Chester D. Clapp George Clark Dwane R. Collins Robert W. Coombs Robert H. Cortner Leonard S. Cottrell, Jr. John E. Crawford John A. Creelman William Ray Crow Mary Lane Cunningham Aileen H. Davis John Eisele Davis Herman De Fremery John J. DeMott, Jr. Philip G. Denver Therese L. DeSousa Bessie B. Dinin Larry A. Doty John F. Dowd William A. Doyle Howard Easley Edwin C. Ellick Swan A. Engwall Frank J. Falck Guy V. Farrell Abbott L. Ferriss Roberta May Fitzgerald John Lynn Fletcher Roland A. Fogg Leroy Nelson Foster

Charlotte Fox Wyatt R. Fox Joseph B. Francus Robert Stanton French Edith Cummins Garfield Elaine Gerson Walter Gieber Robert D. Gillman George M. Girdler Roger E. Glasson John A. Glaze Genevieve D. Goff Betty Mallinger Goldbloom C. Thomas Goldsmith Graciela del Cueto Gonzalez-Pondal Jack B. Grafton Robert T. Gray Wendell L. Grav Herbert Marvin Greenberg Helen Finch Greene H Ionathan Greenwald Mohammed Hamid-ud-Din Glenn Russell Hawkes Ruth W. Haynes Mary C. Hazard Jane Wold Headley Evelyn F. Helgerson Virginia M. Henderson William S. Herold Lillian B. Hill Myra E. Hills Fern Robert Hilpert Eugenie S. Hilzim Dorothy Houck Thomas Jackson Houston M. Gordon Howat Anne Hubbell Edwin Morris Hudson Lars L. Hydle Dale A. Isaacs Virginia Ives Richard L. Jenkins Lucille Jenks Max Kaufman Cecil Bernard Keene Ida B. Kelley Edwin G. Kellner Harriet K. Kessler Margaret Ilene King George W. Knox Ernest R. Kolovos Carlton L. Krathwohl William C. Krathwohl R. Andrew Lady Richard R. Landes Louis La Rosa Charlotte L. Lawrence Harry G. Lawrence Jordan Lawrence

C. D. Leatherman Yolanda Withers Lee Henry Loeblowitz Lennard Leo Lieberman Eleanor Anne Lindahl Robert D. Lindsay Herbert Lipman Sidney Lirtzman Clara Lovitz Herbert G. Ludlow Donald E. Lundberg John G. Lynn Marion Sonnenberg Lynton Richard C. Maass Ruth G. Mack Vera D. Mann Joseph A. Marin, Jr. Geneva K. Markus James E. Marshall Dorothea M. Marston Nancy T. Martin John W. McCrary Warren I. McGovern Vincent S. Mendola Ruth Atherton Merrill Eleanor M. Meyer William G. Meyer Beatrice Rubin Miller Oren W. Miller David W. Morgan Conrad G. Mueller Theresa G. Muller Carlos P. Mullin Richard G. Murney Jack A. Nall Albert R. Neville Elizabeth V. New Howard F. Noble N. Thomas Norden Arthur J. Orange Toby Oxtoby Philip Palermo Lee L. Parker, Jr. Ambalal S. Patel Berthold G. Pauley Alice E. Pawling Elmer Cartier Pepin Ester Perlow Gordon E. Peterson I. Emerick Peterson Anna Rosen Plotnick Renzo L. Pochini John W. Pritchard James C. Reed Mary E. Reidy Jean F. Reiss George E. Renaud Robert R. Riddle C. Harold Ripper

Eric Riss

Edwin H. Robbins David W. Rodgin Annelies Argelander Rose Ivan L. Russell Elizabeth J. Rutherford Irene P. Sabo Patricia Ann Salver Tommie Marie Anderson Samkange Louie R. Sarracino Lois Saute Leslie Schaffer Dorothy R. Schaffner Donald P. Scharlock Bernard Schneider Gabriella R. Scholnich Arthur H. Schrynemakers Johanna Easley Schulte Charles R. Schuster, Jr. Ernest Schweitzer S. Eric Seidman Fred F. Senerchia Frank Q. Sessions Daryl G. Severin Mildred E. Shannon Ann Esbenshade Shelby Mandel Sherman Richard P. Shore William R. Sickles Sidney Siegel Edibaldo Silva-Lopez Kathlyn C. Silvania Robert C. Smader Adrienne Jean Smith James Frederick Smith Leo Fred Smith Dorothy F. Snyder Kenneth R. Snyder Edward Soles Vernon W. Sparks Sara Lew Spindel Theodore Stein Charles A. Stewart, Jr.

Isabel C. Stewart. Joan C. Stewart Fritz W. Stirner John Summerskill Donald M. Swain Hollie J. Swedeen, Jr. Edith M. Taylor Ordway Tead Gilbert E. Teal John B. Teeple Robert C. Templeton Elizabeth Sands Tilley Howell J. Triplett Charles L. Tucke Leon Ryo Uyeda Michael James Vaccaro Ann L. Vroom Juliette Daly Wallerstedt Hulda M. Warfield Daniel F. Wascoe Harry J. Waters Zeldah Matt Wean Sidney W. Weatherhead Ruth L. Webb Marian S. Webster Wallace I. Welker Robert Raymond White Mildred L. Whitescarver Richard E. Wienke Raymond A. Wilkie, Jr. Robert Earl Williams Finis W. Pete Wilson James W. Wilson Joseph W. Wissel Lois McCord Wolf Gladys Tipton Wolff Charles G. Wolz James M. Woolington Norman Edwin Wright Clyde H. Wurster Richard A. Yocum John W. Youngstrom Maureen B. Zlody

c. 33 former members were reinstated:

Malcolm L. Baas
Harold V. Batt
Johanna R. Goldsmith
Bauer
Warren C. Bower
J. C. Brengelmann
Leon O. Brenner
Norman Cohen (Mass.)
Willard F. Day
Mary Jayne Eaton
Francis Leo Ernest
Chester E. Evans
Mabel R. Farson
Morris Gallant

Nicholas L. Gerren
David Grauer
Herbert Marvin Greenberg
Roy B. Hackman
Edward W. Hargrave
Reginald L. Jones
Eric G. Kent
Isobel Pinto Klein
Harrison D. Leidy
Lewis L. R. Lingley
Walter G. Nelson
Edward Newbury
Kenneth R. Newton
B. Gale Oleson

John A. Plag Sidney M. Rappaport Milton J. Rosenberg Douglas R. Talcott Paul D. Walter M. J. Wantman

d. 32 Members were transferred to duesexempt status:

Helen W. Bechtel Samuel J. Beck Euri Belle Bolton Elsie O. Bregman Thomas O. Burgess Etta C. Gillman Herbert Gurnee Joseph V. Hanna P. L. Harriman Julia Heil Heinlein William T. Heron Marion P. Jenkins Thomas N. Jenkins Winthrop N. Kellogg Mabel G. Kessler Theodore Lentz

Kathryn E. Maxfield Edna Fox McGuire Herbert Moore Francis H. Parsons E. F. Patten Wilda M. Rosebrook Esther Katz Rosen David Segel Agnes A. Sharp Sadie M. Shellow Donald F. Showalter Lula Stevens Helen Thompson Robert Sydney Thompson Wallace T. Wait Irving C. Whittemore

e. 381 new Members and 757 new Associates were elected as of January 1, 1961, their names having been printed in the *American Psychologist*, 1961, 16, 30-35.

f. 7 new Members and 12 new Associates failed to confirm their election by payment of dues:

Arthur H. Cain (M)
Richard Weston Caswell
Norman A. Crowder
Catherine H. Ditmore
Leroy Farmer
Benson E. Ginsburg (M)
Francois Haravey (M)
Hoyt Howard Harper
Donald LeRoy Hartford

Janice M. Lynn (M)
Samuel Bernard Marks
Norman Charles Oberman
Sara K. Polka (M)
Lynn V. Rigby
Kenneth E. Smoot
Z'ev Spanier
John William Van Horn
Doris V. Washington
Nathan Weitman (M)

g. 102 Associate members, having obtained their doctoral degrees in psychology, were transferred to Member status as of January 1, 1961, their names having been printed in the *American Psychologist*, 1961, **16**, 32.

h. 97 Members were elected by the Council of Representatives to the status of Fellow effective January 1, 1962:

NAME

NOMINATING DIVISION

Joe Kennedy Adams
Estefania Aldaba-Lim
Irving Emanuel Alexander
Abram Amsel
John C. Armington
Fred Attneave
Lynn E. Baker
Arthur Joseph Bindman

General
Clinical
Clinical
Experimental
Experimental
Experimental
Military
Clinical

Jack Willard Birch
Donald S. Blough
Leland Powers Bradford
John Lott Brown
Roger William Brown
Robert Callis
Charles F. Cannell
William Matthew Canning
William Eugene Coffman
George H. Collier
Michael R. D'Amato
Martin Deutsch
William Robert Dixon
Elizabeth Monroe Drews
Robert Louis Ebel

James P. Egan
David Ehrenfreund
Charles B. Ferster
Ned Allen Flanders
William Gellman
Marvin David Glock
Harold Goodglass
Richard Marion Griffith
Norman Guttman
John Snodgrass Harding
Richard M. Held
Vivian Humphrey Hewer
John R. Hills

Ernest Albert Hirsch Martin Leon Hoffman

John Lewis Holland Jay M. Jackson David Hibbs Jenkins Frank B. Jex Elizabeth M. Junken Robert Lester Kahn Henry Felix Kaiser

Harry I. Kalish
Frederick H. Kanfer
Roger Thomson Kelleher
Tracy Seedman Kendler
Fred Nichols Kerlinger
Richard L. Krumm
Carl J. Lange
Julian Jack Lasky
David Levine
Harry Levinson
Gardner Lindzey
Ardie Lubin

Margaret Barron Luszki Floyd Christopher Mann Howard Yale McClusky George A. Miller Wilbur C. Miller Harman Barry Molish Experimental
SPSSI
Experimental
Personality and Social
Counseling
SPSSI
School
Educational
Experimental
Experimental
SPSSI
Educational
School
Evaluation and Measurement

School

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Experimental
Experimental
Experimental
Educational
NCPAD
Educational
Clinical
Clinical
Experimental
SPSSI
Experimental
Counseling
Evaluation and Measurement
Clinical

Personality and Social,
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Educational
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Evaluation and Measurement, Educational

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Educational
Military
Military
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Personality and Social
Evaluation and Measure-

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SPSSI
SPSSI
SPSSI

SPSSI, Educational Experimental Teaching Clinical Philip W. Morse
William Charles Morse
Edward James Murray
John Edward Muthard
Walter Scott Neff
Alvin John North
Kenneth N. Ogle
Donald Campbell Pelz
Rosemary Pierrel
Norman Polansky
Floyd Ratliff
Bertram Herbert Raven

Maynard Clinton Reynolds Thomas A. Ringness Irvin Rock Phil Howard Schoggen Muzafer Sherif Lewis J. Sherman Alberta Engvall Siegel Jennings Richard Simon Morris Isaac Stein Renato Tagiuri Hans-Lukas Teuber Donald L. Thistlethwait David Valentine Tiedeman Alexander Tolor Ellis Paul Torrance Joseph A. Tucker William Watson Turnbull Leonard Paul Ullmann Robert Vineberg Sol L. Warren Robert C. Wilson

Marvin Zuckerman

i. The following 80 persons, already Fellows of the APA, were nominated and elected by the divisions to the status of Fellow in the divisions indicated:

Harold H. Abelson Joseph B. Adelson Thelma G. Alper Mortimer H. Appley Rudolph Arnheim George R. Bach Alfred L. Baldwin Raymond A. Bauer Edward A. Bilodeau Leslie J. Briggs Joseph H. Britton Donald R. Brown Jerome S. Bruner

NAME

Marion E. Bunch Walter Houston Clark Arthur P. Coladarci Clinical Educational Clinical Counseling NCPAD Experimental Experimental SPSSI Experimental SPSSI Experimental Personality and Social, SPSSI School School Experimental

Experimental
SPSSI
SPSSI
Clinical
Developmental
Industrial
Personality and Social
Personality and Social

Experimental Educational Counseling Clinical Educational Military Educational

Military
Educational
Clinical
Military
NCPAD
Evaluation

Evaluation and Measurement. Clinical

DIVISION

Educational Personality and Social SPSSI Teaching

Teaching SPSSI SPSSI SPSSI Personality and Social Teaching

Teaching
Educational
Educational
Personality and Social
Educational

Maturity and Old Age Educational Evaluation and Measurement Walter W. Cook John W. Cotton Bingham Dai Morton Deutsch Stanford C. Ericksen Anna S. Espenschade Richard I. Evans Nicholas A. Fattu Sidney J. Fields Burton Fisher, Jr. Joshua A. Fishman Benjamin Fruchter Edwin E. Ghiselli Robert Glaser Susan W. Gray Ernest A. Haggard Robert J. Havighurst Glen Heathers

Julian Hochberg Robert R. Holt Lloyd G. Humphreys Eugene Jacobson Sidney Q. Janus E. Lowell Kelly Otto Klineberg

Nicholas Hobbs

Herbert E. Krugman Wilbur L. Layton Harry Levin George D. Lovell George Mandler

W. J. McKeachie Arthur W. Melton Bernice L. Neugarten

William A. Owens

C. Robert Pace Harold B. Pepinsky Luigi Petrullo Henry Platt Alan O. Ross John M. W. Rothney Martin Scheerer May V. Seagoe

Pauline S. Sears Robert R. Sears Stanley E. Seashore Laurence Siegel Irving E. Sigel Hirsch L. Silverman

B. F. Skinner
Robert B. Sleight
Richard L. Solomon
George D. Spache
J. E. W. Wallin
Goodwin Watson
Robert I. Watson
Harold D. Webster
Robert D. Wirt

Educational Educational SPSSI

Personality and Social Educational Educational

Personality and Social Educational

Educational
Consulting
SPSSI
Educational
Industrial
SPSSI
Educational
School
Educational
Maturity and Old Age

Educational SPSSI, Educational Esthetics

Personality and Social Educational Industrial Consulting Educational

Personality and Social

SPSSI Educational Educational Teaching

Personality and Social

General Educational

Developmental, Maturity and Old Age Maturity and Old Age

Educational
SPSSI
Public Service
Clinical
Consulting
Educational
SPSSI
Educational
Educational
Educational
Educational
SPSSI
Educational
Educational
SPSSI
Educational

Educational School, Maturity and Old

Age Educational Military Experimental Educational Personality and Social

Consulting Educational Educational School Julius Wishner Personality and Social
Herman Witkin Personality and Social
Philip Worchel Personality and Social
Alvin F. Zander Educational
Frederick A. Zehrer Military
Karl E. Zener Esthetics

- 2. The Board reports that it has referred to the Membership Committee the questions raised by Division 16 in their annual report regarding procedures and standards for electing Fellows. The Membership Committee has been asked to examine this problem as it relates to similar problems relevant to other divisions.
- 3. Council received with thanks the report of the Committee on Scientific and Professional Ethics and Conduct and voted that by reference in the Rules of Council the revised rules and procedures be adopted as the minimum procedural rules for the conduct of the committee and be ordered printed in the American Psychologist.
 - B. Affiliation and Related Matters:
- Council voted that the APA become an endorser of the 1940 Statement of Principles on Academic Freedom and Tenure of the American Association of University Professors.
- 2. The Board reported it received an oral report on the Council for Research in Education and referred to the Board of Scientific Affairs the responsibility of making nominations of APA representation to the CRE and requested BSA to review periodically the function being served by the Council.
- 3. The Board reports it voted to express its appreciation and sympathetic agreement with a resolution passed by the Advisory Panel on Psychology and Social Sciences of the Department of Defense on the death of Colonel Philip H. Mitchell.

IV. DIVISIONS

A. The Board reported that the National Council on Psychological Aspects of Disability—A Division of the APA, will have two additional representatives, after September 1961.

B. The Board informed Council that Division 23, Consumer Psychology, has completed its election of officers and is now in operation.

C. Council voted to receive with thanks the reports submitted by the following divisions:

Division 2: Teaching

Division 7: Developmental

Division 9: SPSSI

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Division 12: Clinical

Division 13: Consulting

Division 14: Industrial

Division 16: School

Division 17: Counseling

Division 18: Public Service

Division 19: Military

- D. The Board called Council's attention to the unusually complete and informative annual reports submitted by Divisions 9, 12, and 16.
- E. Council reports that it received a supplemental report of an action taken by Division 9 under date of August 30, 1961.
- F. Council adopted the new schedules of division representation to Council as reported below and directed that conformity with the schedule be effected by elections to be held in 1962:

COUNCIL REPRESENTATION

Division	Number of Representatives
1. General psychology	.3
2. Teaching of Psychology	3
3. Experimental Psychology	4
5. Evaluation and Measurement	3
Developmental Psychology	3
8. Personality and Social Psycholog	y 5
9. SPSSI	4
10. Esthetics	1
12. Clinical Psychology	6
13. Consulting Psychology	2
14. Industrial Psychology	4
15. Educational Psychology	3
16. School Psychologists	4
17. Counseling Psychology	4
18. Psychológists in Public Service	2
19. Military Psychology	2
20. Maturity and Old Age	2
21. Engineering Psychologists	2
22. Psychological Aspects of Disabilit	y 4
23. Consumer Psychology	2
	-
Total Division Representatives	6.3
State Association Representatives	34"
APA Officers not Division Representa	itives 10
Total Council Membership	107

^{*} Oklahoma, Ontario, and Puerto Rico are the only "State" associations not yet represented.

V. ORGANIZATION AND STRUCTURE OF THE APA

A. The Board transmitted to Council the annual report of the Policy and Planning Board and the following actions were taken:

- 1. On the recommendation of the Board of Directors, Council referred back to the Policy and Planning Board its recommendation regarding APA affiliation with other organizations and requested that the problem be further studied with consideration being given to the type and range of organizations with which the APA should affiliate and that specific consideration be given to the appropriateness of APA affiliation with the various organizations with which we are already affiliated.
- 2. Council endorsed the Policy and Planning Board statement that all psychologists be encouraged to join their state association. These associations are becoming increasingly important in local and national affairs and it is important, therefore, that they be representative of psychology and of psychologists.
- 3. Council endorsed the following Policy and Planning Board statement and directed that the Central Office should prepare appropriate procedures for implementing the sense of the statement:

Psychologists should be encouraged to join at least one division of their choice. The Association should make it as easy as possible to apply for membership. This might take the form of a blank included with the annual statement of dues which would be filled out by the applicant, returned to the Central Office with the dues, sorted by Central Office personnel, and forwarded to appropriate division secretaries.

- 4. Council reaffirmed the present Bylaw provisions governing election of Representatives to Council from thinly populated but geographically separate state societies.
- B. The Committee on Constitutional Issues made no report, no issues having been referred to it.
- C. The Board reported the appointment of an Ad Hoc Committee on Psychological Archives consisting of William C. Trow, Leonard Carmichael, and Robert I. Watson, Chairman, with such other members as the committee may add, to consider whether some special disposition should be made of the archives of the Association so that they might be useful to scholars and to investigate whether such action might encourage psychologists to contribute private materials to the designated institution.
- D. Council voted to amend the Rules of Council by approving the following changes:

- Section I (Organization), Paragraph 13.
 In implementing Article XIII of the APA Bylaws (Affiliation of Other Organizations with the Association), it is the intent of Council that the only organization currently eligible for such affiliation is Psi Chi and it is now affiliated.
- 2. Section III (Elections), Paragraph 14. Add the paragraph: "Unless it is an ex officio appointment, there shall be at least two nominees on the final election ballot for each office of Council Representative."
- Section IV (Membership), Paragraph 2.
 Delete: "April 1. Publication of list of candidates for Fellow status in the American Psychologist."
- 4. Section IV (Membership), Paragraph 6. Delete the paragraph: "A list of candidates for elevation to Fellow status shall be published in the *American Psychologist* about April 1 with an invitation to members of the Association to supply comments to the division or to the Membership Committee."
- Section VII (Publications). Amend by changing throughout the section the job title of Managing Editor to Production Manager.
- 6. Section VII (Publications), Paragraph 1. Amend to read: "The Publications Board shall consist of twelve members, six to be elected by the Council of Representatives for staggered terms of six years, three to be elected annually from the Council of Editors by that council, the Treasurer and Executive Officer ex officio, and the Production Manager ex officio to serve as the Secretary of the board.
- 7. Section VII (Publications), Paragraph 2. Delete: "the Managing Editor."
- 8. Section VII (Publications), Paragraph 18. Add: "The standards for APA Directory listings of private practice shall be those appearing on page 828 of the December 1960 American Psychologist."
- 9. Section VII (Publications), Paragraph 21. Amend to read: "The Association will undertake to inform its members, by a notice included in an annual mailing, of subscriptions to journals not published by the Association but which are covered in the Psychological Abstracts and are offered to members at a rate significantly less than would otherwise be available, provided these journals request such listing, are charged for the clerical and printing costs of preparing the list, and understand that the list is not concerned with endorsement of the journals."

- 10. Section IX (Education and Training), Paragraph 7. Add the paragraph: "There shall be a Committee on Communication with High School Teachers that shall have responsibility for considering problems on the teaching of psychology in high schools and in the dissemination of knowledge about psychology to students and teachers in high schools. The committee shall consist of four members elected for staggered terms of four years. The committee shall report to the Council through the Education and Training Board."
- 11. Section XIV (Central Office), Paragraph 16. Add the paragraph: "Central Office personnel shall not serve as other than ex officio members of APA boards or committees, nor shall they ever serve as chairmen of APA boards or committees."
- 12. Section XV (Financial), Paragraph 3(3). Amend to read: "Fixed Assets Reserve Fund, to which there shall be added an amount equal to the annual charge for depreciation of the fixed assets, and from which shall be expended amounts as approved by a two-thirds majority vote of the Board of Directors for the replacement of furniture, fixtures, equipment and building, but not sums expended for repairs."
- 13. Section XV (Financial), Paragraph 3(4). Amend to read: "Operating Reserve Fund, to which shall be added amounts budgeted from current income until a reserve equal to the equivalent of one-quarter of the yearly operating budget shall have accumulated, and from which funds may be withdrawn on a two-thirds majority vote of the Board of Directors."
- E. Although recommended by the appropriate committee or board, the Board of Directors recommended against and Council disapproved the following changes:
- 1. Section I (Organization), Paragraph 13. Add an additional rule to construe Article XIII, Paragraph 2, of the APA Bylaws, that reads "not eligible for membership in the Association," as "Not yet eligible for membership in the Association."
- 2. Section VIII (Convention Affairs). Amendments to the Rules of Council dealing with the question of convention affairs. Council referred the amendments back to the Convention Committee for the formulation of a suitable set of Committee Rules for submission to Council at the next Annual Meeting.

VI. PUBLICATIONS

- A. Council received the report of the Council of Editors with thanks. Actions on its recommendations are included in the actions on the Publications Board report.
- B. Council received the report of the Publications Board with thanks and took the following actions:
- 1. Noted the appointment of William K. Estes as Editor of the *Journal of Comparative and Physiological Psychology* for 1963-68, and David A. Grant as Editor of the *Journal of Experimental Psychology* for 1963-68.
- 2. Council approved, that beginning with the 1962 volume, the regional associations be charged for publication in the *American Psychologist* at a per-printed-page rate based on "total page cost," as defined by the audit, and that secretaries of regional associations be informed of the rate to be charged in 1962.
- 3. Council approved the following page allotments for calendar year 1962:

JOURNAL	PAGES	CHANGE
Contemporary Psychology	380ª	_
J. Abnormal & Social Psychology	900	-500
J. Applied Psychology	400	
J. Comparative & Physiological	768	48
J. Consulting Psychology	576	-
J. Educational Psychology	400	
J. Experimental Psychology	1,200	136
Psychological Abstracts	1,088	
Psychological Bulletin	500	*****
Psychological Monographs	550	70
Psychological Review	400	_
	7,162	-246

[&]quot;The page allotment is regarded as exclusive of ads.

4. Council approved the following editorial expense budgets for 1962:

JOURNAL	BUDGET	CHANGE
Contemporary Psychology	\$ 5,620	\$-3,845
J. Abnormal & Social Psychology	3,300	-650
J. Applied Psychology	500	50
J. Comparative & Physiological	7,125	4,900
J. Consulting Psychology	3,356	200
J. Educational Psychology	750	-
J. Experimental Psychology	7,800	4,400
Psychological Abstracts	9,800	
Psychological Bulletin	680	-
Psychological Monographs	450	*****
Psychological Review	1,200	300
	\$40,581	\$5,355

- 5. Council authorized an associate editorship for the *Journal of Comparative and Physi*ological Psychology, beginning in 1963.
- C. The Board transmitted to Council the Summary Report of Journal Operations for 1960.
- D. After considering the alternatives of increased page allotments versus allowing publication lag to increase inordinately, the Board voted the following page revisions for calendar year 1961.

JOURNAL	PAGES	CHANGE
Contemporary Psychology	380°	a
J. Abnormal & Social Psychology	1,400	500°
J. Comparative & Physiological	720	48
J. Experimental Psychology	1,064	200
	3,564	748

* The page allotment is reinterpreted as being exclusive of ads.

^bThe additional 500 pages (to be later redefined if necessary so as to include all remaining manuscripts processed by the present Editor) authorized in 1961 are to enable the new Editor to publish in his first issue in 1962 only manuscripts which he has processed.

E. The Board reported approval of the following revisions in editorial expense budgets:

1. Calendar year 1960:

JOURNAL	BUDGET	CHANGE
J. Experimental Psychology	\$3,153	\$103
	\$3,153	\$103

2. Calendar year 1961:

JOURNAL	BUDGET	CHANGE
Contemporary Psychology	\$9,465*	\$1,490
J. Applied Psychology	450	200
J. Consulting Psychology	3,156	200
J. Experimental Psychology	3,400	350
	\$16.471	\$2.240

*\$6,287 for Editor; \$3,178 for Editor-elect.

F. The Board reports it referred to the Policy and Planning Board the question of APA's responsibility for maintenance of standards in the preparation and publication of separates.

G. The Board of Directors received with thanks the report of the Editor of the American Psychologist for 1960.

H. The Board of Directors received with thanks the report of the APA Representative to the American Documentation Institute.

- I. The Board reported that it had instructed the Executive Officer and the Production Manager that, after consulting with the Chairman of the Publications Board, the 1962 issues of the Journal of Abnormal and Social Psychology may be published on a monthly basis or to make such other modifications as in their judgment will help reduce the production time in publishing the journal.
- J. The Board reported that it had approved the submission to the National Science Foundation of a proposal entitled, "Coordinated Study of Information Exchange in Psychology."
- K. Council requested the Board of Directors to consider the place of psychological literature in contemporary science, especially the behavioral sciences, and it further requested Robert R. Holt to prepare a memorandum on the subject.

VII. ANNUAL CONVENTION

- A. The Council voted that the report of the Convention Committee be received with thanks and that within the general context of the recommendations of the Convention Committee a five- or six-day convention, without an APA day, be tried at the earliest feasible date and that any Rule of Council in conflict with the conduct of such a convention be waived for such year.
- B. The Board reported that it had approved the reappointment of George S. Speer as Convention Manager for the three-year period, 1961–1964, with an annual retainer as proposed.
- C. Resolved, that the APA express its appreciation to our host city, New York, and to the many individual New Yorkers whose friendly help and generous forbearance has made the 1961 Convention so pleasant and successful, that we take full cognizance of the loyal and imaginative contribution made to the Convention by Charles N. Cofer and Alexander G. Wesman and the entire membership of their respective committees on local arrangements and program, and that we are again in debt to George S. Speer for his omniscient supervision of convention affairs. To all these, we express our thanks. Be it further ordered that a list of those members who contributed their services to the convention be published with

the record of these proceedings in the American Psychologist.

VIII. EDUCATION AND TRAINING

A. Council received the report of the Education and Training Board with thanks and:

1. Upon the recommendations by the Committee on Evaluation and the Education and Training Board, Council approved the continued approval of those universities already listed for clinical and counseling training and that:

 a. All programs of the listed universities be approved for an additional year.

 b. The clinical psychology training program at Wayne State University be approved.

c. The asterisk be removed from the listings for the University of Massachusetts (clinical), the University of Missouri (clinical), and Temple University (clinical and counseling).

d. At the request of the University of Colorado and New York University, these universities be deleted from the approved list for counseling programs.

e. With reference to the inquiry from a Canadian university for an evaluation visit by the Committee on Evaluation, the Education and Training Board concurs in the recommendation of the Committee on Evaluation, and recommends that extension of the program of evaluation of university programs in clinical and counseling psychology to Canadian universities be approved, subject to approval of the Canadian Psychological Association; however, the Board defers taking any action until it hears from the Canadian Psychological Association.

2. The Board called Council's attention to the Education and Training Board request that the Committee on Evaluation give special attention during its evaluation, advisory or special visits to universities to the different patterns of predoctoral internship practices. The Board expressed particular interest in an examination of the training programs followed by students in clinical psychology over the past five years in those universities to be given regular five-year visits during the coming year.

3. Upon the recommendation of the Education and Training Board and the Committee on Evaluation, Council voted that a fee for advisory visits be instituted, and that a policy be insti-

tuted for a two-year period starting September 1, 1961, providing for a fee to be paid at the rate of \$200 per man-day for advisory visits carried out by the Committee on Evaluation; however, the fee can be waived by the committee on the recommendation of the Executive Officer.

B. Council received with thanks the position paper of the Education and Training Board and the interim report and summary recommendations of the Ad Hoc Committee on Problems of Internship Evaluation. Further, Council adopted the recommendations of the ad hoc committee and the moratorium on the evaluation of predoctoral internship centers in clinical and counseling psychology was lifted. Further, the Education and Training Board and the Committee on Evaluation were requested to examine longrange problems of making the evaluation process maximally efficient and self-supporting.

C. Council received with thanks the report of the Committee on Communication with High School Teachers.

D. The Board reports that it received a progress report on the operation of the NSF supported program of visiting lecturers and was impressed by the number of institutions participating and the quality of the lecturers.

E. The Board reports that it heard a progress report of the NSF Visiting Foreign Scientist Program.

F. The Board reported that it had authorized the Executive Officer to enter into negotiations with the National Institute of Mental Health regarding the conduct of an International Conference on Graduate Training in Psychology and to explore the extent to which information developed at such a conference might be relater to a second edition of the International Directory of Psychologists.

IX. PROFESSIONAL AFFAIRS

A. The Board of Directors reported that it:

1. Authorized continuing the subscription to the Legislative Reporting Service of the Commerce Clearing House for the biennium 1962–1963, as recommended by BPA and the Committee on Legislation.

2. Approved recommendation that state associations be asked to assume responsibility

for the preparation of directories of psychological services.

- a. In preparing such directories, state associations are urged to:
- Confine the directories to the listing of individuals rather than agencies.
- (2) Adopt the format of the APA Directory listing as a minimal presentation of information.
- 3. Asked the Board of Professional Affairs to review problems in the use of guidance records, school records, test scores and similar information as the issue has been raised in the context of the Division 16 annual report and other public reports. The Board noted the BPA plans for a committee to consider problems of confidentiality of information and encouraged BPA to either broaden the scope of this committee or to appoint an additional committee to consider the broader problem involved.
- B. The Council voted that the report of the Board of Professional Affairs be received with thanks. Specific actions on the report are as follows:
- 1. Ad Hoc Task Force "E": Council voted that:
- a Authorization be given the Executive Officer to seek financial support for the conference proposed by the task force to study and improve interaction between psychology and education.
- 2. Insurance Coverage for Psychological Services: Council voted that:
- a. The BPA statement regarding insurance coverage for psychological services not be adopted and, further, that the Council action at the sixty-eighth Annual Meeting regarding this matter (Paragraph IX-B-4 of the 1960 Proceedings, American Psychologist, Vol. 15, p. 762) be rescinded. The Board reports it has instructed the Executive Officer to continue efforts to extend the APA Major Medical Insurance Program to include outpatient services rendered by psychologists. In addition, the BPA is instructed to continue investigating this problem, paying particular attention to the expansion in the number of people being covered by insurance programs, while also noting the tendency for insurance companies to restrict the extent to which out-patient services in the mental health areas are covered.

- 3. American Board for Psychological Services: The Board reported it concurred with the recommendation of BPA that ABPS be encouraged to dissolve as a corporate entity as of May 31, 1961.
- 4. Council concurred in the BPA recommendation that APA's representation to the Groupement Internationale pour la Coordination de la Psychiatrie et des Méthodes Psychologiques be 'iscontinued and that the Rule of Council I-11 be so modified.
- 5. Council approved the continued participation of the APA in the proposed organization of scientific societies allied to medicine, and that the Executive Officer propose for the approval of the Board of Directors such financial support as a more definite plan warrants.
- 6. The Board of Directors reported that, on the recommendation of BPA, it had instructed the Executive Officer to explore further the desirability of representation in a proposed interprofessional commission in the area of pupil personnel services.
- 7. The Board of Directors reported that it has voted to continue its membership in the Council of National Organizations for Children and Youth with a contribution of \$100 with future membership to be weighed in the light of the program developed.
- C. Reports were received for the following committees and representatives reporting through BPA:
- Committee on Ethical Standards of Psychologists
 - 2. Committee on Legislation
 - 3. Committee on Member Insurance
- 4. Organization and Functioning of State Associations
- 5. Committee on Relations with the Social Work Profession
 - 6. Committee on Retired Psychologists
 - 7. Committee on State Examination Procedures
 - 8. Ad Hoc Committee on Mental Retardation
- 9. Ad Hoc Committee on Relations with Sociology
 - 10. Ad Hoc Task Force "E" (Education)
- 11. Representative to the American Association of Marriage Counselors
- 12. Representative to the American Public Health Association Committee on Public Health and the Behavioral Sciences

- Representative to the Groupement Internationale pour la Coordination de la Psychiatrie et des Méthodes Psychologiques
- 14. Representative to the Joint Commission on Mental Illness and Health
- 15. Representative to the National Society for Crippled Children and Adults
- 16. Representative to the American Speech and Hearing Association
- 17. Committee on Scientific and Professional Responsibility
 - D. No reports were received from the following:
- Committee on Academic Freedom and Conditions of Employment
- Committee on Relations with the American Psychiatric Association
 - 3. Ad Hoc Committee on Private Practice
- 4. Representative to the International Society for Rehabilitation of Disabled
- 5. Representative to the National Tuberculosis Association
- Representative to the World Federation for Mental Health

X. SCIENTIFIC AFFAIRS

- A. Council voted that the report of the Board of Scientific Affairs be received with thanks. Specific actions on the report are as follows:
- 1. Ad Hoc Committee on a Psychology Exhibit at the Chicago Museum of Science and Industry: Council concurred in the following recommendations:
- a. That the present committee be continued in its work and that Wilbert S. Ray be added to the committee.
- b. That the committee be empowered to establish panels of experts or to consult experts about special exhibit areas or exhibit problems, examples of which are teaching machine procedures, computer fields, and film project facilities.
- c. That once the exhibit content is acceptably established, authorization be provided (1) to obtain funds, and (2) to let orders and contracts for construction of exhibits.
- d. That suggestions and criticisms be made of the proposed exhibit content by BSA and Council.
- Committee on Auto-Instructional Methods:Council concurred in the following recommendations:

- a. The APA continue its participation in the study of the problems of auto-instruction by continuation of the present committee.
- b. The members of the APA committee serve as members of a joint AERA-APA-DAVI Committee on Standards in Auto-instructional Methods, it being understood that any statements issued in the name of the joint committee would require prior review and approval by the three parent organizations.
- c. In addition to its participation in this joint committee, the APA committee (BSA Committee on Self-Instruction) should preserve its separate identity, inasmuch as it would have special concerns with the scientific implications of selfinstructional methods and other implications of special interest to psychology and less germane to the other fields represented in the joint committee.
 - d. The Board of Directors reports that it:
- (1) Approved the interim statement of guidelines for immediate release, approval having already been given by AERA and DAVI and suggested that the statement be published in the American Psychologist.
- (2) Instructed the Executive Officer to write to the United States Office of Education expressing APA's support of the contract proposal being submitted by AERA and indicating APA's intention of participating in the activities of the joint committee.
- Representatives to the Scientific Manpower Commission:
- a. Upon recommendation of BSA and the Board, Council voted that APA continue its affiliation with the Scientific Manpower Commission and voted its annual contribution of \$100.
- B. Reports were received for the following committees and representatives reporting through BSA:
 - 1. Committee on Psychological Tests
 - 2. Committee on Scientific Awards
 - 3. Committee on Auto-Instructional Methods
- Ad Hoc Committee on a Psychological Exhibit at the Chicago Museum of Science and Industry
- 5. Committee on the Walter V. Bingham Lecture
- 6. Committee on Precautions and Standards in Animal Experimentation
 - 7. Delegates to the Inter-Society Color Council

- 8. Representatives to the Scientific Manpower Commission
- Representatives to the Social Science Research Council
- Representatives to the American Association for the Advancement of Science
- C. No report was received from the Representatives to the National Research Council.
- D. Council voted that, as requested by the National Society for Medical Research, the APA be represented on the National Council of that society, and that the Chairman of the APA Committee on Precautions and Standards in Animal Experimentation be the interim representative; and the Board reported that it had authorized a contribution of \$200.00 to the society.
- E. Council voted that a sum be included in the 1962 Budget as the final action in support of Project A, which will enable the editor to complete Volume 7.
- F. The Board reported that it voted approval of submission to the National Science Foundation of a proposal entitled, "The Production of a Film Series in Psychology."
- G. The Board reported it heard a report regarding Congressional testimony on the Cooperative Research Program of the United States Office of Education.

XI. INTERNATIONAL RELATIONS

- A. Upon the recommendation from the Committee on International Relations in Psychology, the Board voted that the Executive Officer should:
- Attempt to obtain funds for the continuation or even the increase and expansion of the International Lecturer Program.
- 2. Attempt to obtain funds to support representation at international psychology meetings; however, the Executive Officer reports that funds for this purpose from private foundations are less likely to be available to the APA since they are now being handled through other agencies.
- B. Upon the recommendation from the Committee on Psychology in National and International Affairs:
- 1. The Board authorized the Executive Officer to:
- a. Accept a possible two-year grant of not less than \$15,000 per year to support the equivalent

- of a full-time staff member in the Central Office to work in the area of national and international affairs.
- b. Participate in a program with the American Political Science Association to enable young psychologists to have direct experience with Government operations.
- c. Explore with the committee the obtaining of funds for a special seminar in the summer of 1962.
- d. Accept a grant in the vicinity of \$5,000 for the preparation, under the committee's technical supervision, of a manuscript on existing, needed, and potential research on "psychological factors in international affairs."
- The Board reported that it has referred the problem of a study of the image of psychology back to the committee for further clarification.
- C. Council reaffirmed the concerns and precepts which led to the original establishment of the Committee on Psychology in National and International Affairs, and which are restated in the second paragraph of the special report of the committee, and Council encourages the broadest participation by psychologists in discussion of matters of national urgency, while recognizing that public stands by the Association should represent the best traditions of science and social responsibility.
- D. The Board reports it heard a report from the Executive Officer and from Carl Pfaffman on progress in planning the 1963. International Congress of Scientific Psychology to be held in Washington, D. C.
- E. Council voted a contribution of \$1,000 to the United States National Commission to UNESCO for the conduct of a conference on "Africa and the United States: Images and Realities" to be held in Boston on October 22-26, 1961.
- F. Council voted to receive with thanks a report from the APA Representative to the United States Commission for UNESCO.
- G. The Board reported that it authorized the Executive Officer to produce a volume on Russian travel during 1960 under a grant from the Human Ecology Fund and to appoint a reviewer with authority to edit the manuscripts.

H. No report was received from the Representatives to the International Union of Scientific Psychology.

XII. PUBLIC RELATIONS

A. Council received with thanks the report of the Committee on Public Information and voted that no further action is now required since the major ideas contained in the statement of policies have already been published in various APA documents.

XIII. APA CENTRAL OFFICE

A. The Board of Directors reported that it:

1. Voted to establish the new position of Business Manager, Grade V to replace the former position of Accountant, Grade IV.

 Requested the Executive Officer to acknowledge the services of Harold H. Bracken, former APA Accountant.

3. Authorized the Executive Officer to enter into formal arrangements for APA's participation in a proposed "Program for National Information on Mental Health Manpower." The proposal was initiated and developed by the National Institute of Mental Health in cooperation with the professional societies for psychiatry, psychology, nursing, and social work.

B. The Board reported that it authorized the employment of legal counsel for the APA on an annual retainer basis instead of an hourly fee basis.

C. The Board reported that it voted to establish a new Grade V position in place of the presently authorized Grade IV position which was associated with the Department of Administrative Services and to realign the functions previously performed to allow increased emphasis on psychological manpower and demographic studies.

D. The Board reported it authorized the Executive Officer to either purchase or rent a new machine installation in the Central Office to replace the present Addressograph equipment.

E. The Board voted that for Grades I through IV the Central Office Salary Schedule be modified by including an annual salary increase for six additional years of the same amount as the final semiannual increment for each grade.

F. The Board voted to modify the Central Office Salary Schedule by removing the minimum salary level for Grade V and by removing the experience requirement presently stated in the job descriptions for this grade.

G. The Board reported that it discharged with thanks the ad hoc Committee on the APA Head-

quarters.

H. No report was received from the House Committee.

XIV. FINANCIAL MATTERS

A. The Board of Directors reported that it:

1. Approved the acceptance of the following external grants and contracts:

a. A continuation grant in the amount of \$34,055 from the United States Public Health Service for the fiscal year beginning July 1, 1961 for the work of the Education and Training Board.

b. A grant in the amount of \$23,130 from the National Science Foundation to continue the program of Visiting Scientists beginning September 15, 1961.

c. A grant in the amount of \$18,180 from the National Science Foundation to continue the program of International Scientists beginning January 1, 1962.

d. A grant in the amount of \$35,000 from the American Council of Learned Societies in support of the 1963 International Congress of Psychology.

e. A grant in the amount of \$5,000 from the Society for the Investigation of Human Ecology in support of a publication on foreign travel.

f. A contract in the amount of \$17,428 for the work of the APA in maintaining the 1961 Register of Scientific Personnel in cooperation with the National Science Foundation.

g. A grant from the National Science Foundation for "The APA Coordinated Study of Information Exchange," in the amount of \$167,700.

2. Voted to continue its relations with National Educational Television in its NSF supported educational television series on psychology and to appoint a committee to work with NET in the authentication of the individual presentations.

3. Voted that starting in 1962 the Executive Officer be authorized to pay vouchers of the Recording Secretary for necessary expenses

in connection with clerical and secretarial assistance required in fulfilling the Recording Secretary's duties, and that the previous honorarium be discontinued.

- 4. The Board reports it approved the processing of a request from Division 20 to NIMH for sponsorship of a conference on research on the psychological aspects of aging, with provision that an Editor of the Proceedings be appointed early in the planning of the conference and that the Editor have final authority for determining the content of the Proceedings, and also subject to appropriate budget revision as suggested by the Executive Officer.
- 5. The Board reported the payment from budgeted funds of \$3,232.80 to ABEPP during 1961 in accordance with the policy established at the 1959 Annual Meeting.
- 6. The Board reported that it has instructed the Executive Officer that in the subcontracting or regranting of funds received from external sources the Central Office should make arrangements in granting overhead rates such that the APA is appropriately reimbursed for its overhead costs for handling the funds.

- B. Council voted that it accepts the report of the Finance Committee with thanks and that:
- The Annual Audit Report for 1960 by Ernst and Ernst be accepted.
- Ernst and Ernst be retained as auditors for 1961.
- C. Council approved the 1962 budget as proposed by the Treasurer.
- D. Council unanimously authorized the Board to enter into such obligations as appear desirable to the Board in providing for an adequate Headquarters.
- E. The President reported the appointment of a Headquarters Committee of the Board of Directors to consist of Meredith Crawford, Edwin B. Newman, and Ross Stagner.
- XV. Reports of Other Boards, Committees, Representatives and Delegates, and Related Matters
- A. The annual report of ABEPP was distributed for the information of the Board of Directors and the Council of Representatives.
- B. The Board reported it heard an informal report on plans to establish a new National Institute of Child Health and Human Development.

REPORT OF THE TREASURER

MEREDITH P. CRAWFORD

George Washington University

Human Resources Research Office

HE Treasurer's Report this year will be concerned with three financial matters and, therefore, it will be somewhat longer than usual. First, I will comment on the operations of the Association for the years immediately past, the current one, and the budget for the year ahead. Second, a brief review of the financial history of the Association since 1936 will be given to trace the growth of our net worth over that period. Finally, I will comment on an important action taken by the Council of Representatives during this convention.

OPERATING STATEMENTS

1960

Our auditors, Ernst and Ernst, report that our expenses in 1960 totaled \$841,493.67 as compared with an income of \$904,593.60, resulting in a difference of income over expense of \$63,099.93, to which was added \$11,089.88 from the *Journal of Abnormal and Social Psychology* Reserve. Our net worth was hereby increased to a total of \$411,898.32, which has been allocated to our various

reserve accounts bringing these totals to:

Operating Reserve	\$128,659.00
Fixed Asset Reserve	104,129.57
Directory Reserve	20,000.00
Journal of Abnormal and Social Psychology	
Reserve	5,839.76

The remaining \$153,269.99 is held as Unallocated Net Worth.

1961

Last September in Chicago the Council adopted a budget for expenditures of \$968,800 and an anticipated income of \$995,000. On the basis of experience through the first half of the year and with conservative predictions for the remaining anticipated income and probable expense, it now appears that we will end the year with an excess of income over expense of some \$85,000, which will be added to our net worth to bring that figure to about \$500,000.

1962

The budget for 1962, adopted by Council, calls for an income of \$1,102,062 and expenses of \$1,042,790. The major categories of income are as follows:

INCOME:	1961	1962	Change
Dues and Fees	\$533,640	\$544,032	\$ 10,392
Journal Subscriptions	319,800	362,250	43,450
Other Journal Publication	66,000	76,000	10,000
Employment Bulletin and			
Directory	24,500	27,300	2,800
Other Publications	7,500	15,200	7,700
Nonpublication	43,560	77,280	33,720
	-		-

Total Income \$995,000 \$1,102,062 \$107,062

The increase in Dues and Fees results from a conservative estimate of the new members, corrected for nonpayment of dues. The new figure for Journal Subscriptions reflects additional subscribers among our membership and a steady rise in nonmember subscriptions. Other Journal Publication income will rise with the growing sale of back issues of the journals and a greater use of early publication. About \$31,000 of this income item is in advertising in our journals. The anticipated sale of Volumes 4, 5, and 6 of *Psychology: A Study of a Science* (Project A) accounts for the upward change in the Other Publications item; the increase

in anticipated overhead in contracts executed by the APA Central Office represents, in larger part, the increase in Nonpublication income.

On the expense side for 1962 the major categories are:

EXPENSE:	1961	1962	Change
Publication	\$476,750	\$496,200	\$19,450
Central Office Costs	348,250	399,300	51,050
General APA Activities	57,900	64,500	6,600
Boards & Committees	56,000	52,590	-3,410
Building	29,900	30,200	300
Total Expense	\$968.800	\$1.042.790	\$73,990

Publication expense includes some increase in Journal printing costs and final expenses in finishing Project A. The increase in Central Office Costs reflects the increases in salary awarded in accordance with a schedule adopted by the Council last year for Grades I-IV, increases in the salaries for Grade V approved annually by the Board of Directors, and by the addition to the Central Office staff of some six new people (four in publications, one new Grade V, and a secretarial position to aid in our responsibility in preparing for the International Congress of Psychology for which the APA is host in Washington in the summer of 1963). General APA activities will include some increase in convention costs and in other APA activities. We expect some decrease in the amounts required for Boards and Committees. With this budget we expect an excess of income over expense of over some \$59,000 which should increase our net worth to about \$550,000.

FINANCIAL HISTORY

The net worth of our Association is the difference between our assets and our liabilities for the date on which a balance sheet is prepared. Our auditors prepare one for us each year as of 31 December. Our assets are in the form of cash, marketable securities, land, buildings, furniture and fixtures, accounts receivable, loans, and other items. How these are distributed, particularly between cash and securities, depends upon the time of year.

In omputing the asset value of our building, furniture, and fixtures each year, we have subtracted an amount from the cost of these to represent the decreased value of these assets with use. At the end of the theoretical life of these fixed

\$1,246,081

assets, they would have no book value. Thus our net worth at a particular time is realizable in the various categories in which our assets are carried.

In 1936, our net worth was \$48,662. By 1946, it had grown to \$91,119; and in 1951, it was \$194,204. In 1952, we acquired our present building in Washington, expending some of our cash, with a resulting net worth of \$221,980. At the end of 1960, on our last audited year, the net worth, as reported above, stood at \$411,898. A summary of our balance sheet as of December 31, 1960, is as follows:

ASSETS	
Cash	\$379,838
Securities	532,560
Land, Building, and Equipment	258,858
Other	74,825
Total Assets	\$1,246,081
LIABILITIES	
Accounts payable and grant balances	\$165,969
Deferred income for use in 1961	668,214
Total Liabilities	\$834,183
NET WORTH	411,898

It should be apparent from this display that the value of our net worth is realizable from our various asset categories, and that our reserve accounts for Operating Reserve, Fixed Asset Reserve, Directory, and the Journal of Abnormal and Social Psychology are all accounts within our net worth and not separate funds. The Council of Representatives has voted that our Operating Reserve account should be kept at approximately one-quarter of our Annual Budget, or for the current year, about \$250,000.

THE APA HEADQUARTERS

When we moved into our present headquarters building in 1952, it was more than adequate and we were able to rent space on the upper floors. In 1958, the Policy and Planning Board, at the request of Council, made a study of the projected growth of the Association and the concurrent growth of the Central Office staff, which has increased at a constant ratio to APA membership.

These projections have been brought up-to-date with actual figures through 1961, and it becomes apparent that:

We will outgrow our current headquarters building within the next 2 or 3 years.

We should provide for a staff of some 100 persons by approximately 1983.

From these projections it seemed wise to the Council to "authorize the Board to enter into such obligations as appear desirable to the Board in providing for an adequate headquarters." A committee of Edwin B. Newman, Ross Stagner, and Meredith Crawford, with consultation from the local APA Headquarters Committee, was appointed by the President.

How this committee will accomplish its task is vet to be determined, but I wish to acquaint you with certain possibilities. We will consider the choices among selling our present buildings and renting space in a Washington office building, rebuilding on our present site, purchase of a suitable building elsewhere in Washington, or building on a new site. Should we continue to follow the policy of owning property, we would expect to use accumulated cash and securities in an amount to retain an adequate operating reserve, to use the income from sale of present properties if we choose another location, to borrow additional funds and pay them back on a regular annual basis (probably 20 years), and to amortize the cost of the new building over a like period. The net result would be the acquisition of a new building within the next 2 or 3 years, which would be paid for in 20 years. Also, at the end of 20 years, we would hope to have monies toward replacement of that building. We would expect to derive some income from the rental of space in the new building during the early part of the 20-year period.

The cost of such a transaction has not been fully determined but it is reasonable to believe that some increase in dues would be required. A specific recommendation will be made to Council in St. Louis in 1962. In no case would we consider a plan which would require more than an increase of five dollars per member—and we have reason to believe that it can be done for less.

It would be our intention to realize sufficient income over expense to build up, in liquid assets, an amount approximately equivalent to the depreciation.

OFFICERS, BOARDS, COMMITTEES, AND REPRESENTATIVES OF THE AMERICAN PSYCHOLOGICAL ASSOCIATION

1961-62

APA OFFICERS 1

President: Paul E. Meehl (1961-62)
University of Minnesota
President-Elect: Charles E. Osgood (1961-62)
University of Illinois

Past President: Neal E. Miller (1961-62)

Yale University

Recording Secretary: Edwin B. Newman (1961-64) Harvard University

Treasurer: Meredith P. Crawford (1957-62)

Human Resources Research Office Executive Officer: John G. Darley (1959-64)

APA Central Office

BOARD OF DIRECTORS

The President, the President-elect, the Past President, the Recording Secretary, the Treasurer, the Executive Officer, and:

Quinn McNemar (1959–62) Victor C. Raimy (1959–62) Daniel Katz (1960–63) M. Brewster Smith (1960–63) Paul M. Fitts (1961–64) Ross Stagner (1961–64)

COUNCIL OF REPRESENTATIVES

The Council of Representatives is composed of the Board of Directors, *Division Representatives*, and *State Association Representatives*. The *Rep*resentatives for the current year, with term of office, follow:

Neil R. Bartlett (1961–64)—Div. 2 Brent N. Baxter (1960–63)—Div. 14 Ralph F. Berdie (1959–62)—Div. 17 F. K. Berrien (1959–62)—Div. 1 Robert R. Blake (1959–62)—Div. 8 Milton L. Blum (1959–62)—Div. 14 Edward S. Bordin (1960–63)—Div. 12 Urie Bronfenbrenner (1959–62)—Div. 9 George Calden (1959–62)—Wisconsin

¹ Except as otherwise indicated, terms of officers, committee members, and representatives begin after the Annual Meeting.

Dora F. Capwell (1960-63)—Pennsylvania Wendell R. Carlson (1959-62)-Div. 18 Rosalind D. Cartwright (1961-64)-Div. 8 Irvin L. Child (1960-63)—Div. 8 Dorothy M. Clendenen (1960-63)-Div. 17 Charles N. Cofer (1961-64)-Div. 3 Meredith P. Crawford (1957-62)-Treasurer Lee J. Cronbach (1961-64)-Div. 8 John G. Darley (1959-64)-Executive Officer Morton Deutsch (1961-64)-Div. 9 Paul R. Dingman (1961-64)—Iowa Robert N. Dorsey (1961-64)-Arkansas, Louisiana Philip H. DuBois (1960-63)-Div. 5 Elizabeth Duffy (1960-63)-Div. 1 Marvin D. Dunnette (1961-64)-Div. 14 James H. Elder (1959-62)-Washington M. H. Elliott (1960-63)-Div. 16 T. L. Engle (1960-63)-Div. 2 Sibylle Escalona (1960-63)—Div. 7 Ernest V. Estensen (1959-62)-Nebraska, North Dakota, South Dakota John L. Finan (1959-62)-Div. 19 Frank W. Finger (1959-62)-Div. 1 Donald W. Fiske (1960-63)-Illinois Paul M. Fitts (1960-63)-Div. 21 Sol L. Garfield (1960-63)-Div. 12 W. Scott Gehman (1960-63)-North Carolina Harry B. Gilbert (1961-64)-Div. 16 E. Ellis Graham (1960-62)—Div. 16 Harold Guetzkow (1960-63)-Div. 8 Ruth Bishop Heiser (1960-63)—Div. 13 Nicholas Hobbs (1959-62)-Div. 12 Robert R. Holt (1960-63)-Div. 12 Paul Horst (1961-64)-Div. 5 H. Max Houtchens (1960-63)-District of Columbia Daniel Katz (1961-64)-Div. 9 Raymond A. Katzell (1959-62)-New York Gregory A. Kimble (1959-62)-Div. 3 Karl D. Kryter (1959-62)-Div. 21 Raymond G. Kuhlen (1961-64)-Div. 20 Samuel B. Kutash (1959-62)-New Jersey Roger T. Lennon (1960-63)-Div. 5 Clarence J. Leuba (1959-62)-Div. 2

Gardner Lindzey (1961–64)—Div. 8 Eleanor Maccoby (1959–62)—Div. 7

John K. McCreary (1960-63)—Maine, New Hampshire, Rhode Island, Vermont

Milton W. McCullough (1959–62)—Ohio

Quinn McNemar (1959-62)—Board of Directors

Louis L. McQuitty (1959-62)-Div. 5

Thomas M. Magoon (1961-64)-Maryland

Mark A. May (1959–62)—Connecticut

Paul E. Meehl (1961-62)-President

Curtis B. Merritt (1960-63)—Arizona, Nevada Mortimer M. Meyer (1961-64)—California

John E. Milholland (1959-62)—Div. 2

Neal E. Miller (1961–62)—Past President

Kate Mueller (1959-62)—Div. 10

Gardner Murphy (1960-63)—Div. 9

Paul Mussen (1960-63)—Div. 7

Theodore Newcomb (1960-63)—Div. 9

Edwin B. Newman (1961-64)—Recording Secretary

Jarold R. Niven (1960-62)-Div. 14

Walter D. Obrist (1961-64)-Div. 20

Charles E. Osgood (1961-62)-President-elect

Jay L. Otis (1960-63)—Div. 13

Leonard Pearson (1960-63)—Div. 22

Luigi Petrullo (1960-63)-Div. 18

Francis J. Pilgrim (1960-62)-Div. 23

Lillian G. Portenier (1960-63)—Idaho, Montana,

New Mexico, Utah, Wyoming

Steve Pratt (1961-64)—Kansas

Victor C. Raimy (1959-62)-Board of Directors

Lorrin A. Riggs (1960-63)-Div. 3

A. Dudley Roberts (1960-63)—Kentucky, Hawaji

Eliot H. Rodnick (1960-63)-Div. 12

Anne Roe (1961-64)-Massachusetts

Kermit K. Schooler (1960-63)-Div. 23

C. Winfield Scott (1959-62)-Div. 15

Edward Joseph Shoben, Jr. (1961-64)-Div. 17

Paul S. Siegel (1959-62)—Alabama, South

Carolina

Jacob Silverberg (1960-63)--Virginia

M. Brewster Smith (1960–63)—Board of Directors

William U. Snyder (1960-63)-Div. 12

Donald Snygg (1959-62)-Div. 15

Richard L. Solomon (1961-64)-Div. 1

Philip I. Sperling (1960-63)-Div. 19

Ross Stagner (1961-64)—Board of Directors

Julian C. Stanley (1960-63)-Div. 15

Harold W. Stevenson (1961-64)-Div. 7

Fred A. Stonesifer (1960–63)—Delaware, Mississippi, West Virginia

George A. W. Stouffer (1960-63)-Div. 16

Donald E. Super (1960-63)-Div. 17

Mildred C. Templin (1961-64)-Div. 22

Robert L. Thorndike (1961-64)-Div. 15

Leland E. Thune (1959-62)-Tennessee

Shalom E. Vineberg (1961-64)-Div. 22

Robert S. Waldrop (1961–63)—Div. 22

Michael A. Wallach (1961–64)—Div. 10

Sue A. Warren (1960-63)—Oregon

Delos D. Wickens (1960-63)—Div. 3

Katherine W. Wilcox (1960–63)—Michigan

C. Gilbert Wrenn (1960-63)—Div. 17

To be elected (1961–64)—Colorado, Florida, Georgia, Indiana, Minnesota, Missouri, Oklahoma, Ontario, Puerto Rico, and Texas.

BOARDS, COMMITTEES, AND REPRESENTA-TIVES TO OTHER ORGANIZATIONS RE-PORTING THROUGH THE BOARD OF DIRECTORS

STANDING BOARDS AND COMMITTEES

MEMBERSHIP COMMITTEE

Harry J. Older (1959-62), Chairman

Frank W. Finger (1960-63)

Paul M. Fitts (1961-64)

FINANCE COMMITTEE

Meredith P. Crawford (1957-62), Chairman

Thomas W. Harrell (1959-62)

Edwin R. Henry (1960-63)

Harold G. Seashore (1961-64)

CONVENTION COMMITTEE

Harold Guetzkow (1960-62)

Alexander G. Wesman (1960-62)

Marion E. Bunch (1960-63), Chairman

Eleanor J. Gibson (1960-63)

Harold M. Hildreth (1961-64)

Wilse B. Webb (1961-64)

Charles E. Osgood (1961-62), ex officio

George S. Speer, ex officio

COMMITTEE ON SCIENTIFIC AND PROFESSIONAL ETHICS AND CONDUCT

Marion E. Bunch (1957-62)

John A. Stern (1960-62)

Edward M. Glaser (1958–63), Chairman Paul Eiserer (1960–63) Ernest R. Hilgard (1961–64) A. Q. Sartain (1961–64) Erasmus L. Hoch, Secretary, ex officio

ELECTION COMMITTEE

Wolfgang Köhler (1959–62) D. O. Hebb (1960–63) Neal E. Miller (1961–64), *Chairman*

POLICY AND PLANNING BOARD

Lloyd G. Humphreys (1959–62) Roger W. Russell (1959–62) Harold Schlosberg (1959–62), Chairman Neil R. Bartlett (1960–63) Edwin R. Henry (1960–63) Ivan N. Mensh (1960–63) Anne Anastasi (1961–64) Harold H. Kelley (1961–64) Gregory A. Kimble (1961–64)

PUBLICATIONS BOARD

APA Editors:

Kenneth E. Clark Harry Helson Richard L. Solomon

Noneditors:

Donald W. MacKinnon (1959-62) Leona E. Tyler (1959-62) Francis W. Irwin (1957-63), Chairman Allen L. Edwards (1958-64) Donald W. Taylor (1960-66) Lyle V. Jones (1961-67) Meredith P. Crawford (1957-62), ex officio John G. Darley (1959-64), ex officio

EDUCATION AND TRAINING BOARD

Charles N. Cofer (1959-62)
Donald E. Super (1959-62)
Donald W. Taylor (1959-62), Chairman
Arthur H. Brayfield (1960-63)
Roger W. Brown (1960-63)
Harold W. Stevenson (1960-63)
Jules D. Holzberg (1961-65)
W. C. H. Prentice (1961-65)
Thomas W. Richards (1961-62), ex officio
Sherman Ross, Executive Secretary, ex officio

BOARD OF PROFESSIONAL AFFAIRS

Louis L. McQuitty (1960-62) Ivan N. Mensh (1960-62) Eliot H. Rodnick (1959-62), Chairman Kenneth E. Clark (1960-63) Stanford C. Ericksen (1960-63) Starke R. Hathaway (1960-63) Launor F. Carter (1961-64) Rollo May (1961-64) Marie P. Skodak (1961-64)

BOARD OF SCIENTIFIC AFFAIRS

Richard S. Crutchfield (1959–62) John I. Lacey (1959–62) Clyde H. Coombs (1960–63) Robert B. MacLeod (1961–63) Irvin L. Child (1960–64), *Chairman* Benton J. Underwood (1961–64)

OTHER COMMITTEES

COMMITTEE ON CONSTITUTIONAL ISSUES

Wolfgang Köhler (1959–62) D. O. Hebb (1960–63) Neal E. Miller (1961–64), *Chairman*

HOUSE COMMITTEE

John L. Finan (1959-62) John T. Dailey (1960-63) Howard E. Page (1961-64) John G. Darley (1959-64), ex officio

COMMITTEE ON INTERNATIONAL RELATIONS IN PSYCHOLOGY

Fred E. Fiedler (1959–62) David C. McClelland (1959–62), *Chairman* Eugene Jacobson (1961–64) Leonard Carmichael (1961–63), ex officio James J. Gibson (1958–63), ex officio John G. Darley (1959–64), ex officio

COMMITTEE ON THE 1963 INTERNATIONAL CONGRESS OF PSYCHOLOGY

Leonard Carmichael (1961) Henry P. David (1961) George Ferguson (1961) Eugene Jacobson (1961) Robert B. MacLeod (1961) Donald Marquis (1961) Carl Pfaffmann (1961), Chairman COMMITTEE ON PSYCHOLOGY IN NATIONAL AND INTERNATIONAL AFFAIRS

Harold Guetzkow (1960–62) Joseph Weitz (1960–62)

Fred E. Fiedler (1960-64)

E. P. Hollander (1960–63) Charles E. Osgood (1960–63), *Chairman* Urie Bronfenbrenner (1961–64) Morton Deutsch (1961–64)

COMMITTEE ON PUBLIC INFORMATION

Joseph E. Brewer (1959-62) Arthur J. Bachrach (1960-63), *Chairman* Ross Stagner (1961-64)

COMMITTEE ON APA HEADQUARTERS

Meredith P. Crawford (1961) Edwin B. Newman (1961) Ross Stagner (1961)

AD HOC COMMITTEE ON PSYCHOLOGICAL ARCHIVES

Leonard Carmichael (1961) William C. Trow (1961) Robert I. Watson (1961), Chairman

REPRESENTATIVES TO OTHER ORGANIZATIONS

International Union of Scientific Psychology ²

James J. Gibson (1958-63) Leonard Carmichael (1961-63)

United States Commission for UNESCO ² Eugene Jacobson (1960–63)

COMMITTEES AND REPRESENTATIVES TO OTHER ORGANIZATIONS RE-PORTING THROUGH THE PUBLICATIONS BOARD

COMMITTEES

COUNCIL OF EDITORS

The Council of Editors consists of the Editors of the APA journals: 2

American Psychologist: John G. Darley (1959-

Contemporary Psychology: Fillmore H. Sanford (1962-67)

² Terms are for calendar years listed.

Journal of Abnormal and Social Psychology: Daniel Katz (1962-67)

Journal of Applied Psychology: Kenneth E. Clark (1961-66)

Journal of Comparative and Physiological Psychology: Harry F. Harlow (1951-62), William K. Estes (1963-68)

Journal of Consulting Psychology: Edward S. Bordin (1959-64)

Journal of Educational Psychology: Raymond G. Kuhlen (1958-63)

Journal of Experimental Psychology: Arthur W. Melton (1951-62), David A. Grant (1963-68) Psychological Abstracts: Clifford T. Morgan (1961-64)

Psychological Bulletin: Harry Helson (1959-64) Psychological Monographs: General and Applied: Norman L. Munn (1958-63)

Psychological Review: Richard L. Solomon (1959-64), Chairman

COMMITTEES AND REPRESENTATIVES TO OTHER ORGANIZATIONS REPORT-ING THROUGH THE EDUCATION AND TRAINING BOARD

COMMITTEES

COMMITTEE ON COMMUNICATION WITH HIGH SCHOOL TEACHERS

Robert H. Knapp (1957) Albert S. Thompson (1957) T. L. Engle (1959), *Chairman* Stanley C. Ratner (1960)

COMMITTEE ON EVALUATION

Joseph G. Dawson (1959-62) Frank M. Fletcher, Jr. (1959-62) Thomas W. Richards (1959-62) Cha

Thomas W. Richards (1959-62), Chairman Henry P. David (1960-63)

Frank W. Finger (1961–63)

William Schofield (1960-63)

Ralph F. Berdie (1961-64)

Joseph E. Brewer (1961-64)

Louis D. Cohen (1961-64)

Sherman Ross, Executive Secretary, ex officio

REPRESENTATIVES TO OTHER ORGANIZATIONS

NATIONAL COMMISSION ON ACCREDITING

Sherman Ross (1960)

COMMITTEES AND REPRESENTATIVES TO OTHER ORGANIZATIONS REPORT— ING THROUGH THE BOARD OF PROFESSIONAL AFFAIRS COMMITTEE ON ORGANIZATION AND FUNCTIONING OF STATE ASSOCIATIONS Philip Ash (1961–62) Find McFinney (1959, 62)

COMMITTEES

COMMITTEE ON ACADEMIC FREEDOM AND CONDITIONS OF EMPLOYMENT

Stuart W. Cook (1957–62) Solomon E. Asch (1958–63) Howard F. Hunt (1959–64), *Chairman* Angus Campbell (1960–65) Jum C. Nunnally (1961–66)

COMMITTEE ON ETHICAL STANDARDS OF PSYCHOLO-

John E. Anderson (1955) Melvin S. Hattwick (1955) Wayne H. Holtzman (1955), Chairman Arthur L. Irion (1955) Herbert J. Schlesinger (1955) John I. Wheeler, Jr. (1955)

COMMITTEE ON LEGISLATION

Gordon V. Anderson (1955)

Stanford C. Ericksen (1958–62), Chairman Edwin B. Newman (1958–63) Albert S. Thompson (1958–63) Mortimer M. Meyer (1959–64) Thomas M. Magoon (1958–65) Elizabeth B. Wolf (1960–65) Harry Levinson (1961–66)

COMMITTEE ON MEMBER INSURANCE

Carl H. Rush, Jr. (1956–62) Roderick H. Bare (1959–63) Paul W. Thayer (1957–64), *Chairman* Benjamin Shimberg (1953–65) Henry P. David (1961–66)

Committee on Mental Health Research and Programs

Fillmore H. Sanford (1960-62) William F. Soskin (1958-62), Chairman Lewis B. Klebanoff (1960-63) Harry V. McNeill (1960-63) Ira Iscoe (1961-64) Andie L. Knutson (1961-64) OF STATE ASSOCIATIONS

Philip Ash (1961-62)

Fred McKinney (1959-62)

James H. Elder (1960-63)

M. Curtis Langhorne (1959-63), Chairman

Howard R. Davis (1961-64)

Herbert Dörken (1961-64)

COMMITTEE ON RELATIONS WITH THE AMERICAN PSYCHIATRIC ASSOCIATION

Nevitt Sanford (1953)
Milton Wexler (1953)
Stuart W. Cook (1957), Chairman
Carlyle F. Jacobsen (1957)
Robert E. Harris (1959)
E. Lowell Kelly (1959)
John G. Darley (1959–64), ex officio

George A. Kelly (1953)

COMMITTEE ON RELATIONS WITH THE SOCIAL WORK PROFESSION

Alfred S. Friedman (1959-62), Chairman Harry V. McNeill (1959-62) Richard Sanders (1959-62) James G. Kelly (1961-66) Jerome L. Singer (1961-66)

COMMITTEE ON RETIRED PSYCHOLOGISTS

Harold E. Burtt (1959-62) Raymond G. Kuhlen (1961-62) Robert W. Kleemeier (1960-63), *Chairman* Bruce V. Moore (1960-63) John E. Anderson (1961-64) David C. McClelland (1961-64)

COMMITTEE ON SCIENTIFIC AND PROFESSIONAL RESPONSIBILITY

Thomas Gordon (1955–62) Raymond A. Bauer (1959–63), *Chairman* Stanford C. Ericksen (1959–64) Henry W. Riecken (1961–65) Theodore R. Vallance (1961–66)

COMMITTEE ON STATE EXAMINATION PROCEDURES

David V. Tiedeman (1958–62) Lillian D. Long (1958–63) Noble H. Kelley (1958–64) Joseph R. Sanders (1958–65), Chairman Theodore H. Blau (1961–66) AD HOC COMMITTEE ON PRIVATE PRACTICE

Dora F. Capwell (1958) Cynthia P. Deutsch (1958) Albert Ellis (1958) Bertram Forer (1958) Noble H. Kelley (1958) William McGehee (1958), Chairman

Jesse Orlansky (1958) E. W. Senderling (1958)

AD Hoc Committee on Relations with Sociology

Raymond A. Bauer (1958) Wilbert J. McKeachie (1958) M. Brewster Smith (1958) Joseph M. Bobbitt (1959), Chairman

AD HOC TASK FORCE "E" (Education)

Barbara Biber (1960)
N. L. Gage (1960)
M. Curtis Langhorne (1960)
Arthur A. Lumsdaine (1960)
David G. Ryans (1960)
Robert M. Gagné (1961)
William A. Hunt (1961), Chairman
Julian C. Stanley (1961)

AD HOC COMMITTEE ON MENTAL RETARDATION

Sidney W. Bijou (1960) Rue L. Cromwell (1960), *Chairman* Rick F. Heber (1960) William P. Hurder (1960) Frances A. Mullen (1960)

AD Hoc Review Committee on APA Policy re-GARDING IDENTIFICATION AND LISTING OF PSY-CHOLOGICAL SERVICES

James F. T. Bugental (1961) Joseph R. Sanders (1960), *Chairman* Robert D. Wirt (1960)

AD HOC COMMITTEE ON CONFIDENTIALITY OF REC-ORDS

Ralph F. Berdie (1961) John T. Dailey (1961), *Chairman* Morris Krugman (1961) AD HOC COMMITTEE ON INSURANCE COVERAGE FOR PSYCHOLOGICAL SERVICES

George E. Copple (1961) Bertram Pollens (1961) William Schofield (1961) Joseph Weitz (1961), Chairman Rogers H. Wright (1961)

REPRESENTATIVES TO OTHER ORGANIZATIONS

American Association of Marriage Counselors Howard E. Mitchell (1959)

American Public Health Association Committee on Public Health and the Behavioral Sciences

Andie L. Knutson (1958) Godfrey M. Hochbaum (1959)

American Speech and Hearing Association Joseph M. Wepman (1958)

International Society for Rehabilitation of the Disabled

Morton A. Seidenfeld (1959)

Joint Commission on Mental Illness and Health

Nicholas Hobbs (1955)

NATIONAL SOCIETY FOR CRIPPLED CHILDREN AND ADULTS

Lloyd M. Dunn (1956), Representative George W. Hohmann (1956), Alternate

NATIONAL TUBERCULOSIS ASSOCIATION Daniel Casner (1959)

WORLD FEDERATION FOR MENTAL HEALTH Harry V. McNeill

COMMITTEES AND REPRESENTATIVES TO OTHER ORGANIZATIONS REPORTING THROUGH THE BOARD OF SCIENTIFIC AFFAIRS

COMMITTEES

COMMITTEE ON PRECAUTIONS AND STANDARDS IN ANIMAL EXPERIMENTATION

Arthur J. Riopelle (1959-62), Chairman J. P. Scott (1959-62)

Jay B. Mowbray (1961–63) William L. Sawrey (1961–63) Donald Walker Lauer (1961–64) Mark R. Rosenzweig (1961–64)

COMMITTEE ON PSYCHOLOGICAL TESTS

Edward E. Cureton (1959–62) Jane Loevinger (1959–62) Herbert S. Conrad (1960–63), *Chairman* John W. French (1961–65)

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DISTINGUISHED SCIENTIFIC CONTRIBUTION AWARDS

1961

THE Awards for Distinguished Scientific Contribution are presented on APA Day of the Annual Convention. The awards for this year, along with those for the preceding years since the establishment of the custom, are:

1956	1957	1958
Wolfgang Köhler	CARL I. HOVLAND	FRANK A. BEACH
CARL R. ROGERS	CURT P. RICHTER	PAUL E. MEEHL
KENNETH W. SPENCE	EDWARD C. TOLMAN	B. F. SKINNER
1959	1960	1961
Leon Festinger	HARRY F. HARLOW	JAMES J. GIBSON
DONALD B. LINDSLEY	CHARLES E. OSGOOD	DONALD O. HEBB
NEAL E. MILLER	S. SMITH STEVENS	HENRY A. MURRAY

Gibson, Hebb, and Murray were each presented with an engrossed citation of his formal contribution to the development of scientific psychology and a check for one thousand dollars. These psychologists have agreed, in accordance with what is now established custom, to give addresses on some phase of their scientific work on APA Day in 1962. The presentation of the awards was made by Theodore M. Newcomb, Chairman of the Committee for Selecting the Recipients of Awards for Outstanding Contribution to Scientific Psychology.

PRESENTATION OF THE AWARDS

This is the sixth consecutive year in which the APA has made three awards for distinguished scientific contributions to psychology. Each year a five-man committee, whose task it is to select the recipients, has been elected by the Council of Representatives. The procedural steps by which they make their selections have gradually evolved, in such ways as to insure that an ample list of names, proposed by a large and representative group of our members, constitutes an initial panel. The successive steps by which we winnowed down the 100-odd names are as described by Professor Boring, the Chairman of last year's committee, one year ago. (You may read all about it in the American Psychologist of December 1960 if you choose.)

The Board of Directors and the Council of Representatives have provided us with a set of ground rules. The awards are made not for any single study or book, but for distinguished theoretical or empirical contributions to a series of interrelated problems in recent years. All members of the Association—and may I remind you that the word "American" in our official name refers to all of North America—are eligible, with these exceptions: members of the awarding committee, former recipients of the award, and the current President and President-elect. We are admonished, further, to seek diversity "avoiding as far as possible the selection of more than one person

representing a specialized topic, specific material, a given method, or a particular application." These policies, so help us God, we have borne in mind.

Perhaps I should also remind you that each year the recipients are invited, not only to receive the award, in the form of a citation and a check for \$1,000, but to read a paper at the meetings of the Association one year later. Many of you, this morning, heard the papers by the three recipients of last year's awards: Professors Harlow, Osgood, and Stevens.

When, as an undergraduate, I first observed the mysteries of the awarding of honorary degrees at Commencement, I was struck by what seemed to me the appropriateness of the college President's ritual phrase: "Your alma mater honors itself in honoring you." That's just the way I feel about my assignment today.

JAMES JEROME GIBSON

Citation

"For his experimental and theoretical contributions to the psychology of perception as among the most distinguished of our time. Influenced by classical functionalism and by gestalt theory, he has broadened the base of traditional psychophysics to include the specification of the higher order variables of stimulation responsible for our more complex perceptions. His *Perception of the Visual World*

has now become a classic. The current extension of his 'global psychophysics' to other sensory modalities is a significant move toward the development of a psychophysics of the total organism in contact with its whole environment."

Biography

James Jerome Gibson was born in McConnels-ville, Ohio, on January 27, 1904. He attended Princeton University and was awarded the BS degree in 1925, the MA in 1926, and the PhD in Psychology in 1928. For 20 years he was a member of the staff of the Psychology Department at Smith College, serving as Instructor from 1928–29, Assistant Professor from 1929–37, and Associate Professor from 1937–49. Since 1949 he has been Professor of Psychology at Cornell University. He was a Research Associate in Psychology at Yale University in 1935–36 and a Visiting Professor of Psychology at the University of California, Berkeley in 1954–55. He has been honored by a



JAMES JEROME GIBSON

Fulbright award as Senior Research Scholar at Oxford University in 1955–56 and by invitation to become a Member of the Institute for Advanced Study, Princeton, in 1958–59. In 1952 he was awarded the Howard Crosby Warren Medal by the Society of Experimental Psychologists.

During World War II Gibson served his country as a member of the United States Army Air Forces, rising from the rank of Captain in 1942 to Lieutenant Colonel in 1946. He was Director of the Motion Picture Research Unit in the Aviation Psychology Program.

Gibson is a Fellow of the American Psychological Association, and served as President of the Division of Experimental Psychology in 1954–55, and of the Division of Esthetics in 1958–59. He is a member of the Society of Experimental Psychologists, the Society for the Psychological Study of Social Issues, the American Association of University Professors, and the Society of Sigma Xi.

Scientific Publications

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1932

With E. G. Jack & G. Raffel. Bilateral transfer of the conditioned response in the human subject. J. exp. Psychol., 15, 416-421.

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1935

With L. Hudson. Bilateral transfer of the conditioned knee-jerk. J. exp. Psychol., 18, 774-783.

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With M. RADNER. Orientation in visual perception: The perception of tip-character in forms. Psychol. Monogr., 46(6, Whole No. 210).

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With G. Raffel. A technique for investigating retroactive and other inhibitory effects in immediate memory. J. gen. Psychol., 15, 107-116. A note on the conditioning of voluntary reactions. J. exp. Psychol., 19, 397-399.

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With O. H. MOWRER. Determinants of the perceived vertical and horizontal. Psychol. Rev., 45, 300-323.

With L. E. CROOKS. A theoretical field analysis of automobile-driving. Amer. J. Psychol., 51, 453-471.

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With D. Waddell. Homogeneous retinal stimulation and visual perception. Amer. J. Psychol., 65, 263-270. With F. N. DIBBLE. Exploratory experiments on the stimulus conditions for the perception of a visual surface. J. exp. Psychol., 43, 414-419.

With J. CORNSWEET. The perceived slant of visual surfaces—optical and geographical. J. exp. Psychol., 44,

With W. CAREL. Does motion perspective independently produce the impression of a receding surface? J. exp. Psychol., 44, 16-18.

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DONALD OLDING HEBB

Citation

"For creative, insightful theorizing and ingenious experimentation on psychology's fundamental problems, ranging over the domains of perception, learning, motivation, affectivity, and thought; for bold, challenging, yet flexible and fact-oriented efforts to explain behavior and experience through an informed and resourceful use of physiological concepts. Combining broad scientific knowledge, philosophical clarity, a rich personal research experience involving several species, and synthesizing findings selected judiciously from experimental, naturalistic, clinical, and psychometric sources, he has daringly revived and cogently defended neuropsychological conjecture in a form which has generated unusually fruitful research and which exerts an ever-growing influence upon behavioral scientists."

Biography

Donald Olding Hebb was born in Chester, Nova Scotia, on July 22, 1904. His BA was taken in 1925 at Dalhousie University, the MA at McGill University in 1932, and the PhD at Harvard University in 1936. From 1925 to 1934 he was a high school teacher and an elementary school principal. From 1936 to 1937 he was Instructor and Research Assistant at Harvard University: 1937-39, a Fellow in the Montreal Neurological Institute; 1939-41, Lecturer and 1941-42, Assistant Professor at Queen's University, during which time he established the Bulletin of the Canadian Psychological Association (1940) and served as its Editor in 1940-42. Following an appointment in 1942-47 in the Yerkes Laboratories of Primate Biology, he became Professor of Psychology in 1947 at McGill University, serving as Chairman of the Department of Psychology in 1948-58.

He has been Chairman of the Human Resources Advisory Committee, Defence Research Board,



Nakash

DONALD OLDING HEBB

Ottawa (1951-53); Chairman of the Associate Committee on Experimental Psychology, National Research Council of Canada (1956-62); and a member of the Board of Directors, Foundations' Fund for Research in Psychiatry (1960-63). He is a Fellow of the Canadian Psychological Association (President, 1952); the American Psychological Association (President, 1959; Board of Directors, 1954-57; President, Division 3, 1953); Sigma Xi; American Association for the Advancement of Science; an Honorary Fellow of the British Psychological Society (since 1954); Fellow of the Royal Society of Canada (1959); Membre Associé, à titre étranger, of the Société Française de Psychologie (1959); Miembro Correspondiente of the Sociedad Española de Psicologia (1960); Foreign Honorary Member of the American Academy of Arts and Sciences (1961).

He received the Coronation Medal, Canadian Psychological Association (1953); Warren Medal, Society of Experimental Psychologists (1958). He was James Arthur Lecturer at the American Museum of Natural History in 1949, and Hughlings Jackson Lecturer at the Montreal Neurological Institute in 1958. He was awarded an honorary ScD by the University of Chicago in 1961.

Scientific Publications

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1961

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HENRY ALEXANDER MURRAY

Citation

"For his contribution—in theory and practice—to our understanding of man and his works. With the intellectual grasp of a modern Leonardo, he has ranged from physiology and embryology, through personal and clinical psychology, to literary criticism—from the microscopic observation of the smallest of living things to the sympathetic study of an obsession with the largest—from research in the lonely private world of fantasy to a public philosophy of a coordinated world at peace. He has discovered ways of exploring the great themes of human personality and has been moved to do so, not only by the urge to understand but, when

occasion arose, by the practical need for the assessment of men. He has steadied the course of psychotherapy in the shifting winds of fashion. With admirable courage he has contemplated the complexity of human behavior without dismay."

Biography

Henry Alexander Murray was born in New York City on May 13, 1893. He graduated from Groton School in 1911, from Harvard University in 1915 with a major in History, and from Columbia Medical School in 1919. The next year was spent partly in the experimental production and study of gastric tetany and parathyroid tetany in dogs (Columbia, MA) and partly as Instructor in Physiology at Harvard under Lawrence J. Henderson, studying physicochemical equilibria in the blood. After a two years' surgical internship at the Presbyterian Hospital, New York, he was appointed an Assistant and then Associate Member of the Rockefeller Institute for Medical Research, where he studied chemical and metabolic changes as functions of age in chicken embryos (1922-26). A year's leave of absence (1924-25) was spent at Trinity College, Cambridge, conducting studies which resulted in a PhD degree in biochemistry (1927). During this year abroad he became interested in medical psychology and, after a period of analytic work with Jung in Zurich and, later, of study in New York psychiatric clinics, he joined Morton Prince as Assistant in the founding of the Harvard Psychological

On Prince's retirement in 1928, Murray became Director of the Clinic, Assistant Professor of Abnormal Psychology, and organizer of numerous collaborative researches and experiments in the field of personality, which culminated in the publication of Explorations in Personality (1938). He was one of the founders of the Boston Psychoanalytic Institute where he completed the training that formally fitted him to practise psychoanalysis (parttime) until World War II (1943), when he left Harvard to become a Major and then Lieutenant Colonel in the Medical Corps, assigned to the Office of Strategic Services. For his work in organizing and directing various assessment procedures and researches for the OSS in this country and in China, he was awarded the Legion of Merit.

After writing, in collaboration with others, a full account of the techniques and results of the OSS



Fabian Bachrach

HENRY ALEXANDER MURRAY

system of assessment and after completing studies of the life and works of Herman Melville begun in 1925, Murray returned to Harvard to become Professor of Clinical Psychology in the newly constituted Department of Social Relations.

He has served as or on the Board of the Asian Institute; Advisory Board, Educational Testing Service; Assistant editor of *Psychosomatic Medicine*; Patron, Jung Institute, Zurich; and Board of the Frances G. Wickes Foundation. He is member of the American Academy of Arts and Sciences, the American Association for the Advancement of Science, the American Psychological Association, the American Psycho-Analytic Society, the Société Française de Psychologie, and the Melville Society.

Scientific Publications

1919-23

Ten publications on physiological research.

1925-27

Ten publications on research on physiological ontogeny. Summarized in: With A. E. Cohn. Physiological ontogeny: I. The present status of the problem. Quart. Rev. Biol., 2, 469-493.

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1937

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1948

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1949

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1950

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1951

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H. H. Anderson & Gladys L. Anderson. New York:

Prentice-Hall.

1952

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1953

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1954

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- Morton Prince: Sketch of his life and work. J. abnorm. soc. Psychol., 52, 291-295.
- Introduction to Methods in personality assessment. G. G. Stern, M. I. Stein, & B. S. Bloom. Glencoe, Ill.: Free Press.

1958

- Drive, time, strategy, measurement, and our way of life. In G. Lindzey (Ed.), Assessment of human motives. New York: Rinehart.
- Foreword to Man made plain. R. N. Wilson. Cleveland: Howard Allen.
- Individuality: The meaning and content of individuality in contemporary America. Daedalus, 87, 25-47.

1959

Introduction to the issue "Myth and mythmaking."

Daedalus. Boston: American Academy of Arts and Sciences.

- Vicissitudes of creativity. In H. H. Anderson (Ed.), Creativity and its cultivation. New York: Harper.
- Preparations for the scaffold of a comprehensive system. In S. Koch (Ed.), Psychology: A study of a science. Vol. 3. New York: McGraw-Hill.
- With H. CANTRIL & M. MAY. Some glimpses of Soviet psychology. Amer. Psychologist, 14, 303-307.

1960

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- The possible nature of a "mythology" to come. In, Myth and mythmaking. New York: George Braziller.
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1961

- Unprecedented evolutions. Daedalus, 90, 547-570.
- Prospect for psychology. Address delivered at the International Congress of Applied Psychology, Copenhagen, Denmark, August 18. In press.
- Beyond yesterday's idealisms. In, The fate of man. New York: George Braziller.

COMMITTEE ON SCIENTIFIC AWARDS

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EDUCATIONAL FACILITIES AND FINANCIAL ASSISTANCE FOR GRADUATE STUDENTS IN PSYCHOLOGY: 1962-63

SHERMAN ROSS

Education and Training Board

HIS report is similar to previous ones on educational facilities and financial assistance for graduate students in psychology. Institutions with graduate programs in psychology are listed, with information supplied by the respective departments. There is no evaluation of these programs and no implication of approval of them by the American Psychological Association, except those doctoral programs in clinical psychology and in counseling psychology that are indicated by the phrase, "PhD in clinical and counseling APA-approved." See also the statement and list in the American Psychologist for June 1961.

Requirements for Admission

Requirements for admission to graduate study in psychology were summarized for each institution on pages 801-804 of the December 1960 American Psychologist. The course requirements in psychology are relatively few, and many departments prefer that there not be a large number of courses, especially technique courses, completed at the undergraduate level. It is common to expect an undergraduate background of introductory or general psychology, experimental psychology with laboratory, and statistics. In general, however, there are not many specific requirements, and many departments look upon these as being not rigid requirements, but strongly recommended minima which might be made up. An important qualification is scholarship, academic ability, or promise of success in scientific research. It is judged largely on the evidence of achievement at the undergraduate level and on the recommendations from persons in whom the admitting department has confidence. To assist in this evaluation of potential ability, the Graduate Record Examination or the Miller Analogies Test is desired by many departments and required by a few. Some institutions qualify their use of these measures as not the primary criteria but as helpful supplementary information when in doubt on the basis of other criteria. It should be noted that departmental requirements for admission are sometimes more selective than the requirements stated by the graduate school in its bulletin. In any case, well qualified applicants should make contact with the departments in which they are interested, even if they do not quite meet the minimal requirements stated.

Institutional Facilities and Stipends

The following pages summarize the information submitted by each institution on facilities, requirements, and financial assistance for graduate students. The order of each item of information is as follows:

- 1. Name and address of institution. The name and address of the institution apply throughout the description and should be added to the names of officials and their departments when writing. If more than one department at a university is listed, the names and addresses apply to all such departments.
- 2. Application for admission and for fellowships, scholarships, or assistantships. The student must apply for admission to graduate school as well as for stipends. Thus, it is sometimes necessary to write to two persons: one to apply for admission and another to apply for a stipend. Larger universities sometimes request students to apply for admission to the deans of colleges or heads of departments. Smaller universities typically request that applications for admission be made to the Graduate School or Admissions Office. The person or office to which the application for admission should be sent is stated for each institution. Many fellowships and scholarships are outright grants or subsidies and require no service to the department or university. Assistantships are different, being forms of employment for service in a department. Applications for scholarships, fellowships, or assistantships may be made directly to the chairman of the department of psychology unless otherwise stated.
- 3. Tuition. Tuition figures are for tuition and general fees and are usually for the academic year. In some cases, tuition is given for the quarter or semester, or according to semester or course hours. The words resident and nonresident are used by state universities which charge out-of-state residents a larger sum than students from the state itself. The abbreviation nr refers to total of nonresident or out-of-state tuition.
- 4. Types of assistantships. Assistantships may be available for either teaching or research or for a combination of both. The terminology here varies with the university. For example, the terms graduate assistant, laboratory assistant, teaching assistant, clinical assistant, and research assistant are all used. We have not attempted in these entries to go into complete detail regarding the duties required in the various types of

assistantships; the student may obtain this information from the department.

Under teaching assistantship, the entry does not differentiate between a teaching assistantship in which a graduate student has charge of a class and a teaching assistantship in which the student assists a more advanced teacher by grading papers, acting as a laboratory assistant, etc.

Research assistantships are ordinarily granted to students for work on research projects being conducted by members of a department. In some cases various skills, in statistical or laboratory methods, etc., are a prerequisite for these positions and hence first-year graduate students may not be eligible.

5. Hours of work. Hours of work required are usually expressed in hours per week, though sometimes in teaching load or teaching hours. The number of hours indicated should, in many cases, be considered an approximation, especially in the case of research assistantships where the student is ordinarily expected to become part of a research team and also to consider his research work as part of his graduate training, rather than as a job to which he will devote only a limited number of hours.

6. Stipends. Stipends are usually expressed in terms of total stipend for an academic year of nine months. If expressed in any other terms, the unit, such as per month, is named. Stipends for assistantships are usually dependent upon difficulty of the work and training and experience required for it. The abbreviation ex means that the stipend carries with it exemption from tuition or that the stipend covers the cost of tuition. Thus, an entry stipend, ex means that tuition is waived, and stipend, \$500 ex means that the student receives \$500 plus exemption from tuition. A frequent advantage of scholarships and assistantships is the exemption from tuition, often a sum larger than the award itself.

7. First-year students. First-year students are eligible for the award unless the statement is specifically made that first-year students are not eligible. The statement then applies only to the positions immediately preceding it.

8. Veterans Administration traineeships. The VA provides internships as part of the training, leading to the PhD degree, of qualified students in psychology. Departments indicated as having APA-approved programs are eligible for VA traineeships. Students enrolled in any of these programs must satisfy the same requirements as other graduate students; they differ from them only with regard to their part-time employment by the VA in hospitals and clinics. Applications are made to the chairman of the department at any time, but appointments are most likely to begin in the fall. To be eligible for appointment in a VA program, a student must be enrolled in a school which has a doctoral pro-

gram approved by the American Psychological Association. Detailed information about the VA trainee programs may be secured by writing to: Chief Medical Director, Department of Medicine and Surgery; Veterans Administration; Washington 25, D. C.

9. National Defense Education Act fellowships. There are 137 universities participating in the fellowship programs of the NDEA administered by the United States Office of Education. The stipend here is \$2,000 for the first year, \$2,200 for the second year, and \$2,400 for the third year; plus \$400 a year for each dependent. Full details are available from the individual departments.

10. United States Public Health Service stipends. The USPHS program provides some universities with a limited number of stipends for selected graduate students in psychology. Stipends at the predoctoral level range from \$1,800 for the first year to \$3,000 for the fourth year. At the postdoctoral level they are \$6,000 for the first year and \$7,000 for the second year. Universities in which these stipends were available during 1961–62 are indicated. Applications should be made to the chairman of the department of psychology at the desired university.

11. Other positions available. Many departments also have other positions or means of financial assistance for graduate students. If such information was submitted, it is listed in the entry. In addition, many departments have other positions available than those listed here. Departments are often requested to recommend students for teaching evening classes or courses in a nearby smaller college. These positions are not usually available on the basis of paper record or application, and first-year students are ordinarily not considered for them. However, they are part of the possibilities for part-time employment while a graduate student.

The APA Central Office, through its Placement Office, has frequent requests from prospective graduate students for part-time employment while pursuing graduate studies. Few such positions are listed with the APA office. The student who wishes part-time work should write directly to the university in which he is interested.

12. Date of appointment. For several years there has been an agreement among many chairmen of departments with graduate programs in psychology that assistance to graduate students, in the form of scholarships, fellowships, assistantships, or other stipends, would not be offered to candidates before a certain date for the following academic year. The background of this agreement involves the Association of American Universities, of which the Association of Graduate Schools is a part, and is subscribed to by approximately 1,000 North American universities and colleges. The agreement reads as follows:

Member institutions in the Association of American Universities and the American Association of Land-Grant Colleges and State Universities award graduate scholarships and fellowships on April 1 for the following academic year, and the actual or prospective graduate student has until April 15 to accept or reject such an award. Appointments to graduate assistantships may be offered prior to April 1.

At a meeting in September 1959, an informal group of departmental chairmen proposed a new date of March 15 for the offering of assistantships. It is important that candidates interested in awards of assistantships, scholarships, and fellowships apply early enough to provide for consideration before March 15. In addition to this agreement, the Association of Graduate Schools has adopted the following resolution:

In every case in which a graduate assistantship, scholarship, or fellowship for the next academic year is offered to an actual or a prospective graduate student, the student, if he indicates his acceptance before April 15, will still have complete freedom through April 15, to reconsider his acceptance and to accept another fellowship, scholarship, or graduate assistantship. He has committed himself, however, not to resign an appointment after this date unless he is formally released from it.

Therefore, no department should offer any stipend to a prospective graduate student before March 15. Formal fellowships and scholarships awarded by the Graduate School will be delayed until April 1. In all cases, the student has until April 15 to make a binding acceptance. After that date, he is committed not to resign unless formally released.

Advice to Applicants for Financial Assistance

You may make as many applications as you wish, but do not apply for an appointment you would not consider accepting. You may expect to hear the results of applications soon after March 15. Informal notification is often sent by the department, or even by an individual who has funds for a research assistant. If you receive and accept such an offer, you may relax, confident that you will eventually receive formal notification of your admission to the graduate school and of your appointment as an assistant.

A student who has made multiple applications may get more than one offer sometime between March 15 and April 15, and perhaps a few statements that he is listed as an alternate. To protect a candidate against premature decision, most graduate schools subscribe to the code which allows the applicant until April 15 for a final decision. However, if he does not promptly refuse an offer he does not intend to accept, he abuses this privilege and it works hardship on other applicants. For example, a very able student may get several offers around March 15, one of which is from the school of his choice. If he holds up his replies until April 15,

he may block offers to half a dozen men who would be glad to accept the appointments he will reject. We suggest the following procedure:

- 1. As soon as you have two offers, decide which one is the better for you and politely refuse the other.
- Repeat this comparison and decision as each new offer comes in.
- 3. Terminate the process as soon as you get a satisfactory offer from your most preferred school. Accept that offer and advise the other schools of your decision. The other schools will not be hurt by having you withdraw your application even before they make an offer, for they realize that many personal factors determine the choice of each student. On the contrary, they will appreciate your thoughtfulness in opening the way to another student who was below you on their list.

After you have accepted an appointment, do not take your obligation lightly or try to get released from it merely because you think you have received a better offer after April 15. Such irresponsible behavior may spoil your reputation with both institutions involved and with your sponsors.

Do not get too discouraged if you receive no offers by April 15. Vacancies occur through illness or change in career plans, and new openings open up as government grants are announced. These may be filled as late as September 1.

Postdoctoral Arrangements

Facilities for postdoctoral appointments are generally limited because they must be special for the particular individual. Since the postdoctoral applicant does not usually fit into any established program for a degree, he should carefully explore the facilities and potentialities for meeting his needs with the department to which he expects to apply. It is important that all arrangements for special study, research, or any special consideration should be worked out with the department well in advance of the planned period of study.

Adelphi College, Garden City, Long Island, N. Y. Apply for admission to Director, Graduate Division, by March 15. Tuition: \$1,100. A first-year grant-in-aid; up to 10 hours' work; stipend, \$1,100. Assistantships; 10 hours' work; stipend, \$1,100-1,500. Assistantships; 20 hours' work; stipend, \$1,500 ex. Apply by March 15. USPHS stipends; NIMH predoctoral fellowships; NSF graduate fellowships. Master's in general experimental. Doctoral in experimental, clinical, school. PhD in clinical APA-approved.

Alabama, University of, University, Ala. Apply for admission to Dean, Graduate School, as early as possible. Tuition: resident, \$210; nr, \$560. Scholarships; no work; stipend, \$1,000 ex; teaching fellowships; \$1,350 to \$2,500 ex; apply by March 1 to Dean, Graduate School. Assistantships; 15 hours' work; stipend, \$1,500 to \$2,050 ex; USPHS stipends, apply as soon as possible. MA and PhD in clinical, experimental. PhD in clinical APA-approved.

Alberta, University of, Edmonton, Alta., Canada. Apply for admission to Dean, Faculty of Graduate Studies, by August 15. Apply for awards by March 1. Tuition: \$250 per yr. (including nr). Tuition scholarships, university scholarships and fellowships; stipend, \$1,800–3,600. Departmental graduate assistantships, involving teaching and/or research to \$2,200 at Master's level. Doctoral fellowships for research in concept formation to \$3,000. Master's in clinical, comparative and physiological, general experimental, industrial, learning, methodology, personality, psychometrics, psychopathology, sensation and perception, social, theoretical.

Alfred University, Alfred, N. Y. Apply for admission to Dean, Graduate School. Tuition: \$1,200. Assistantships; 15 hours' work; stipend, \$1,200. Master's in general, counseling, school.

American University, Washington, D. C. Apply for admission to Dean, Graduate School. Tuition: \$24 per credit hour. Scholarships. Two teaching assistantships; stipend, \$1,600 ex; 15 to 20 hours' work. Assistantship; stipend, \$1,000. Apply to Dean, Graduate School, before March 15. Master's in psychology. Doctoral in social.

Arizona State University, Tempe, Ariz. Apply to Dean, Graduate College, by March 1. Fees, resident, \$207; nr, fees plus tuition, \$807. Clinical, laboratory, research, and teaching assistantships; 10 hours' work; stipend, \$120 per month; 20 hours' work; stipend, \$200 per month; possibility of more and waiver of \$600 nr tuition. Tuition scholarships; stipend, \$600. Master's in psychology. Doctoral in clinical, general-experimental.

Arizona, University of, Tucson, Ariz. Apply for admission to Dean, Graduate College, before March 15. Fees, resident, \$207; nr, \$807. Tuition scholarships; apply to Dean, Graduate College. Assistantships; 12 hours' work, stipend, \$1,200; half-time teaching or research, stipend, \$2,000 with tuition waived. Apply before March 15. Master's and doctoral in physiological-experimental, clinical, social.

Arkansas, University of, Fayetteville, Ark. Apply for admission to Coordinator of Graduate Studies, Dept. of Psych. Tuition: resident, \$200; nr, \$470. Assistantships; 10-20 hours' work; stipend, \$900-1,800 ex nr; NDEA Fellowships; apply by March 15. Master's in

general-experimental, clinical-counseling; PhD in general-experimental, clinical.

Auburn University, Auburn, Ala. Apply for admission to Dean, Graduate School, four weeks before registration. Tuition: \$60 per quarter. Assistantships; 17 hours' work; stipend, \$100 per month. Other positions available. Apply by April. General Master's with opportunity for some specialization in experimental, clinical, industrial, educational, developmental, guidance, school. For additional information write to Chairman, Dept. of Psych.

Baylor University, Waco, Texas. Apply for admission to Dean, Graduate School, by April 15. Tuition: \$600. Laboratory assistantships; 12–15 hours' work; stipend, \$540–720. Research assistantships; stipend, \$900–1,200, with two-thirds remission of tuition; teaching assistantships, \$900–1,200; NDEA fellowships. MA, MS in Psychology, PhD in clinical, general-experimental, industrial.

Boston University, Boston 15, Mass. Apply for admission to Dean, Graduate School, by April 1. Tuition: \$1,150. University scholarships open to all graduate students; stipend varies. Teaching fellowships; 6 hours' teaching; stipend, \$1,200 ex. Human Relation fellowships; stipend, \$2,000. Assistantships; stipend, ex. Research assistantships in all areas; stipend, \$1,000-3,400. USPHS stipends. Other part-time positions available. Apply by April 1 to Dean, Graduate School. Master's without specialization. Doctoral in theoretical and experimental, social and personality, clinical, counseling. Postdoctoral in clinical, counseling. PhD in clinical and counseling APA-approved.

Bowling Green State University, Bowling Green, Ohio. Apply for admission to Dean, Graduate School, or Chairman, Dept. of Psych., at least three weeks before entrance. Fees: resident, \$450; nr, \$750. Assistantships; 15–18 hours' work; stipend, \$1,200–2,000 part ex; apply by May 1. Special two-year programs including hospital internships; stipend, \$245 mo. part ex. Master's in general-experimental, clinical, industrial, educational.

Brandeis University, Waltham, Mass. Apply for admission to Chairman, Graduate School, preferably by March 1. Tuition: \$1,250. Fellowships, teaching and research assistantships; up to \$3,000; variable hours' work. Scholarships; up to \$1,250. Apply by March 1 to Chairman, Graduate School. Doctoral and post-doctoral in general with emphasis on experimental, theoretical, personality, clinical.

Brigham Young University, Provo, Utah. Apply for admission to Dean, Graduate School, by August 15. Tuition: \$260. Scholarships; no work; stipend, \$260-

2,000 ex. Fellowships; stipend, \$255-1,500 ex; apply to Committee on Scholarships and Fellowships by March 1. Assistantships; approximately 6-20 hours' work; stipend, \$850-1,800; apply by May 1. Master's in developmental, experimental, social, clinical, educational, school, personnel and guidance. Doctoral in clinical, general.

British Columbia, University of, Vancouver, B. C., Canada. Apply for admission to Dean, Graduate School, or Registrar by September 1. Tuition: \$322. Assistantships; 8–12 hours' work, stipend, \$300–500; apply by September 15. Master's in general. Doctoral in general.

Brooklyn College, Brooklyn 10, N. Y. Apply for admission to Division of Graduate Studies. Tuition: \$15 per credit. Fellowships; 18 hours' work; stipend, \$2,320. Apply before March 1. Master's in general.

Brown University, Providence 12, R. I. Apply for admission to Dept. of Psych. or Registrar, Graduate School, by March 1. Tuition: \$1,500. Scholarships; no work; stipend ex. Fellowships; no work; stipend, \$1,500 ex; first-year students not usually eligible. Apply by Feb. 15 to Registrar, Graduate School. Assistantships; 10 hours' work; stipend, \$1,900–2,000 ex. USPHS traineeships in experimental child psychology. Part-time research assistantships available, including summer. Some postdoctoral support available on an individual basis. Apply by February 15 to Chairman, Dept. of Psych., or Registrar, Graduate School. Master's, doctoral, and postdoctoral in experimental (learning, child, psychophysiological).

Bryn Mawr College, Bryn Mawr, Pa. Apply for admission to Dean, Graduate School, before March 1. Tuition: \$1,000. Scholarships; no work; stipend, \$1,000-1,600. Fellowships; 1½ hours' work; stipend, \$2,300. NSF fellowships, stipend, \$2,200. Assistantships; 20 hours' work; stipend, \$1,650-2,500 ex. Apply by March 1. MA and PhD in general-experimental. Postdoctoral in comparative and physiological.

Bucknell University, Lewisburg, Pa. Apply for admission to Chairman, Dept. of Psych., by April 15. Tuition: \$1,150. Department assistantships; stipend, \$700-1,500 ex; Research assistantships; stipend, \$1,000-1,500 ex. General master's in general, experimental, comparative and motivation.

Buffalo, University of, Buffalo 14, N. Y. Apply for admission to Dean, Graduate School of Arts and Sciences, by March 1. Departmental and research assistantships; hours of work vary; stipends, \$1,000-3,000; waiver of tuition possible. USPHS traineeships in clinical, counseling. Teaching fellowships for advanced students. Master's and doctoral in general-

experimental, social, genetic-developmental, physiological. Doctoral in clinical, counseling. PhD in clinical and counseling APA-approved.

California, University of, Berkeley 4, Calif. Apply for admission to Graduate Division.

Department of Psychology: Apply to Dept. of Psych., by May 31. Tuition: resident, \$68.25 per semester; nr, \$318.25 per semester. For scholarships and fellowships apply by Feb. 8 to Dean, Graduate Division. For assistantships, VA, USPHS traineeships apply to Dept. of Psych. by March 1. Research assistantships; 20 hours' work; stipend, \$2,075 (9 months) (ex for students on basis of grade); new students eligible. Teaching assistantships; 20 hours' work; stipend, \$2,250 (9 months) (ex for students on basis of grades). Nursery school assistantships and research assistantships in the Institute of Human Development and the Institute for Personality Assessment and Research. Additional part-time positions available. USPHS stipends. PhD in clinical APA-approved.

School of Education: Apply to Graduate Division before July 15. Tuition: resident, \$68.25 per semester, nr, \$318.25 per semester. Readerships, research assistantships, and a limited number of teaching associateships (after at least one semester in residence). The latter pays approximately \$1,600. Other part-time employment available. Pupil Personnel Services Credential. Master's and doctoral in educational, guidance, and counseling.

California, University of, Los Angeles 24, Calif. Apply for admission to the Graduate Division or Chairman, Dept. of Psych., by February 15. Tuition: resident, none; nr, \$500. Assistantships; 20 hours' work; stipend, \$2,250 for first year. USPHS stipends. Doctoral in general-experimental, clinical, counseling, developmental, industrial, personality, social, measurement. Postdoctoral in clinical, counseling, experimental, physiological. PhD in clinical and counseling APA-approved.

Carnegie Institute of Technology, Pittsburgh 13, Pa. Apply for admission to Dean, Humanistic and Social Studies, by March 1. Tuition: \$1,200.

Department of Psychology: Tuition scholarships; stipend, ex. Research assistantships; stipend, \$1,200-3,000 ex. Teaching assistantships; stipend, \$2,000-3,000; NIMH traineeships. Apply by March 1 to Dean, Humanistic and Social Studies. Doctoral in experimental, industrial.

Behavioral Science Joint Program: Tuition scholar-ships; stipends, ex. Fellowships; no work; stipend, \$2,000-3,500. Research assistantships; \$1,500-2,500, ex. Apply by March 1 to Dean, Graduate School of Industrial Administration. Doctoral in social psychology through interdisciplinary program including mathematics.

Catholic University of America, Washington 17, D. C. Apply for admission to Dean, Graduate School. Tuition: \$900. Scholarship; no work; stipend, \$1,500. Scholarships; tuition, room, board. Apply to Chairman, Committee on Scholarships by February 1. Assistantships; 20 hours' work; stipend, \$1,800; apply by March 1. USPHS stipends. Other part-time positions available. Master's and doctoral in general, experimental-physiological, clinical, counseling. Postdoctoral in clinical, counseling. PhD in clinical and counseling APA-approved.

Chicago, University of, Chicago 37, Ill. Apply for admission to Office of Admissions three months before the date admission is desired. Tuition: \$1,050. Apply for fellowships and scholarships to Committee on Fellowships and Scholarships before February 15.

Committee on Educational and School Psychology: Scholarships; no work; \$350-1,050. Fellowships; no work; \$1,100-2,000. Research assistantships; number of hours' work varies; stipend, \$750-3,000. NDEA fellowships; stipend, \$2,500; restricted to PhD in educational psychology. Doctoral in educational psychology emphasizing research, and in school psychology emphasizing work with children in the school setting.

Committee on Human Development: Scholarships; no work; stipend, \$525-1,050. Fellowships; \$1,100-3,000; no work. Research assistantships; 15-40 hours' work; stipend, \$750-4,200; entering students not eligible. No teaching assistantships. USPHS traineeships in clinical, social gerontology. Other positions available. Doctoral and postdoctoral in child, developmental, clinical and counseling, social, personality, aging, with emphasis upon interdisciplinary approaches. PhD in clinical (with Dept. of Psych.) APA-approved.

Department of Psychology: All applications by February 15. Scholarships; no work; \$525–1,050. Fellowships; no work; \$1,100–2,200. Research assistantships; 10–40 hours' work; \$900–4,000. Teaching assistantships; 13–40 hours' work; \$1,200–4,000; entering students not eligible. USPHS traineeships in clinical, experimental-biological. Other positions available through departmental placement service. Doctoral and post-doctoral in general, biopsychology, personality and psychopathology, social (administered jointly with Dept. of Sociology). Master's as optional step in doctoral program. PhD in clinical APA-approved.

Chico State College, Chico, Calif. Apply for admission to the Registrar by September 1. Tuition: \$37; nr, \$180. Resident counselors in men's and women's dormitories; stipend, \$400. Apply by June 1. Master's in counseling and guidance.

Cincinnati, University of, Cincinnati 21, Ohio. Apply for admission to Head, Dept. of Psych., by June 1.

Tuition: resident, \$475; nr, \$750. Scholarships; no work; stipend, ex. Assistantships; half time teaching assistant; stipend, \$1,800-2,400 ex; research positions, half-time work; stipend, \$1,350. Apply by March 1 to Head, Dept. of Psych., but blank should be obtained from Graduate School Office. Other part-time positions available. Master's in general, measurement, personnel. Doctoral in theoretical-experimental, experimental psychopathology, clinical, counseling.

City College of New York, New York 31, N. Y. Apply for admission to Graduate Division of College of Liberal Arts and Sciences, by March 1. Tuition: \$350. Assistantships; 25 hours' work; stipend, \$2,000. Apply to the Graduate School by March 1. Master's in experimental, clinical, social; in business and industrial at the Baruch School. Apply for latter to Graduate Div., New York 10, N. Y.

Clark University, Worcester, Mass. Apply for admission to Chairman, Dept. of Psych., by March 1. Tuition: \$1,300. Scholarships; stipend, to \$1,800 ex. Assistantships; 15-20 hours' work; stipend, \$1,800-4,000 ex. USPHS stipends. Other positions available. Master's and doctoral in developmental and child, learning, clinical, social-personality, general experimental. Postdoctoral in general, experimental, clinical, developmental, social-personality. PhD in clinical APA-approved.

Colorado State College, Greeley, Colo. Apply for admission to Dean of the Graduate Division. Tuition: resident, \$5 per hr; nr, \$8.50 per hr; summer resident \$6.50 and \$10.50; additional fees to \$300 for six quarters. Master's in educational and guidance; specialist in school counseling, school, school psychometry. Doctoral in educational, guidance.

Colorado State University, Fort Collins, Colo. Apply for admission to Dean, Graduate School, by May 1. Tuition: resident, \$210; nr, \$510. Master's in psychology, guidance and counseling.

Colorado, University of, Boulder, Colo. Apply for admission to Chairman, Dept. of Psych., by April 1. Tuition: resident, maximum \$232; nr, maximum \$720. Scholarships; no work; stipend, ex. Fellowships; no work; stipend, \$800–1,800. Apply by March 1 to Dean, Graduate School. Assistantships; up to 20 hours' work; stipend, \$1,800–2,200 ex nr tuition; apply to Chairman by March 1. OVR traineeships in rehabilitation counseling. USPHS stipends in clinical and in social. Doctoral in general-experimental, social-personality, clinical. PhD in clinical APA-approved.

Columbia University, New York 27; N. Y. Apply for admission to Office of University Admissions before June 1 or November 1. Tuition: \$1,320.

Department of Psychology: Scholarships; no work; stipend, \$1,800-2,000. Fellowships; no work; stipend, \$1,800-3,500. Apply by February 1 to Admissions Office. Research assistantships; variable number of hours of work; stipend, \$500-3,350. Teaching assistantships; 20 hours' work; stipend \$1,800 tuition exempt. Assistantships available to qualified first year graduate students. Other positions available. Doctoral in experimental. Postdoctoral studies in experimental.

Department of Social Psychology: Apply to Admissions Office by February 1. Scholarships; no work; stipend, \$1,500-3,500. Fellowships; no work; stipend, \$1,500-3,500. Research assistantships; 10-20 hours work; stipend, \$1,500-3,350. Teaching assistantships; 20 hours work; stipend, \$1,800-2,000 ex. USPHS training fellowships; stipend, \$1,800-3,000 ex. VA internships in social; variable hours; stipend to \$6,900. Other positions available. Doctoral in social including interdisciplinary work in anthropology, psychology, and sociology. Postdoctoral in social.

Teachers College, Department of Psychological Foundations and Services: Apply for admission to Admissions Office, Teachers College, by April 15 for clinical, counseling, personnel, and school psychologist programs; by August 1 for all others. Tuition: \$40 per point. Scholarships; no work; stipend, \$200-3,000; apply by February 1 to Committee on Fellowships and Scholarships. Assistantships; hours of work and stipends vary, 8 points ex if stipend exceeds \$1,000. Other part-time positions available. USPHS stipends in clinical and school. OVR stipends in rehabilitation counseling. NDEA fellowships in educational, developmental or related areas. Master's in developmental, educational, social, tests and measurements, psychology of school subjects, personnel technician. Two-year diploma programs in school, remedial reading, vocational counselor in community agencies, rehabilitation counselor. Doctoral in clinical, counseling, developmental, educational, personnel, school, social, tests and measurements, group procedures and development. Postdoctoral in clinical, counseling, school, educational, developmental. PhD in clinical and counseling APA-approved.

Connecticut College, New London, Conn. Apply for admission to Director of Graduate Studies by April 15. Tuition: \$40 per credit. Scholarships; no work; stipend, ex. Department assistantship; 20 hours' work; stipend, \$1,800 ex; Research assistantships; 20 hours' work; \$1,800-2,800. Other positions available. Workstudy opportunities. Master's in clinical, research, applied-experimental, general-experimental.

Connecticut, University of, Storrs, Conn. Apply for admission to Dean, Graduate School, by April 1. Tuition: \$150. Assistantships; 18 hours' work; stipends, \$2,040. USPHS stipends. Other positions available. Apply by April 1. Master's and doctoral in clinical, child, general-experimental, personality-social. PhD in clinical APA-approved.

Cornell University, Ithaca, N. Y. Apply for admission to Dean, Graduate School.

Department of Psychology: Tuition: \$1,240 plus fees. Scholarships; no work; stipend, \$600 ex. University fellowships; no work; stipends, \$2,000-2,500 ex; with allowances for nonworking dependents; open to students in all fields. Special fellowships for advanced students; stipend, \$1.200-3,000 ex. Tuition scholarships. NIMH traineeships; no work; stipend, \$1,800 ex. Assistantships; 20 hours' work; stipend, \$1,600 ex. Apply by February 14 to Dean, Graduate School. Master's and doctoral in comparative, differential and psychological tests, experimental, experimental psychopathology, history of psychology and systematic psychology, industrial, personality and social, physiological.

School of Education: Tuition: \$300 plus fees. Assistantships in College Reading Laboratory, University Testing and Service Bureau, General Psychology; 20 hours' work; stipend, \$2,300–2,800 ex. Apply by February 14 to Dean, Graduate School. University Fellowships and Tuition Scholarships. Apply by February 14 to Dr. M. D. Glock, 217 Stone Hall. Master's and doctoral in educational psychology.

Department of Child Development and Family Relationships: Tuition: \$300. Scholarships; no work; stipend, \$300 ex. Fellowships and NIMH traineeships; no work; stipend, \$1,800-3,000 ex, some with dependency allotment. Apply by February 14 to Dean, Graduate School. Assistantships; 20 hours' work, permits full graduate credit; stipend, \$1,950 (9 mos.), \$2,600 (12 mos.) ex. Apply by February 14 to Dr. Alfred L. Baldwin. Master's and doctoral in child development and family relationships.

Dalhousie University, Halifax, N. S., Canada. Apply for admission to Registrar by September 15. Tuition: \$250; for a second year, \$125. University fellowships and scholarships; available for honor graduates of approved universities; stipend, \$400-1,000; apply to Dean of Faculty of Graduate Studies by April 1. Assistantship; 4 hours' work; stipend, \$250; apply by September 15. Master's in general-experimental, clinical.

Delaware, University of, Newark, Del. Apply for admission to Dean, Graduate School, by April 1. Tuition: resident, \$13 per credit hour; nr, \$26. Assistantships; 20 hours' work; stipend, \$1,500-1,800 ex; apply by March 1. Other part-time positions available. Program not specialized for master's. Psychology Department participates in Behavioral Sciences program with

fields of specialization to PhD in general, experimental, social, educational.

Denver, University of, Denver 10, Colo. Apply for admission to Dean, Graduate College. Tuition: \$20 per quarter hour. Teaching, research, and clinical fellowships; stipend, \$2,000, plus 30 quarter hours free tuition for nine months. Assistantships; 10 hours' work; stipend, \$600, plus 15 quarter hours free tuition for three quarters. Fellows should apply before April 15th. Assistants should apply at least three months before opening. Master's in experimental, clinical, counseling. Doctoral in experimental, counseling.

De Paul University, Chicago, Ill. Apply to Chairman, Psychology Department. Assistantships; 20 hours' work; stipend, \$1,500. Master's only.

DePauw University, Greencastle, Ind. Apply for admission to Chairman, Dept. of Psych. Tuition and fees: \$1,150. Assistantship; 12 hours' work; stipend ex; also stipend, \$1,000 ex. Apply by May 1. Master's in general.

Detroit, University of, Detroit 21, Mich. Apply for admission to Dean, Graduate School, at least one month before beginning of semester. Tuition: \$20-25 per credit hour. Fellowships; 18 hours' work; stipend, \$1,600 ex. Assistantships; 9 hours' work; stipend, \$1,000. Men preferred. Apply by March 1 to Dean, Graduate School. Master's in general-theoretical, industrial, clinical.

Drake University, Des Moines 11, Iowa. Apply for admission to Dean of Graduate Division by May 30. Tuition: \$650. Master's in experimental and general.

Duke University, Durham, N. C. Apply for admission to Dean, Graduate School, by March 1. Tuition: \$780-975. Scholarships and fellowships requiring less than six hours. Department assistantships with hours of work varying according to stipend level; stipend, \$800-2,700. Research assistantships, variable stipends to \$3,000. USPHS stipends \$1,800-3,000 plus tuition. NDEA fellowships. Other stipends available for both clinical and nonclinical students. Apply by March 1 to Dean, Graduate School. NDEA interdisciplinary program in biological psychology. Master's in general psychology and as optional step in doctoral program. Doctoral in general-experimental, physiological; clinical, counseling; social, personality. Postdoctoral in clinical and experimental. PhD in clinical and counseling APAapproved.

Duquesne University, Pittsburgh 19, Pa. Apply for admission to Dean, Graduate School. Tuition: \$24 per credit hour. Assistantships; 20 hours' work; stipend, \$1,200 ex. Other positions available. Apply by March 1. Master's in general, existential-phenomenological.

Emory University, Atlanta 22, Ga. Apply for admission to Dean, Graduate School. Tuition: \$900. PhD fellowships; stipend, \$3,000. Assistantships; stipends to \$2,400. MA fellowships; stipend, \$2,400. Research assistantships. Other part-time work available. Apply to Dean, Graduate School, by February 15. Master's and doctoral in general with emphasis on research.

Fisk University, Nashville 8, Tenn. Apply for admission to Director of Admissions by March 1. Tuition: \$565. Several Danforth Fellowships; no work; maximum stipend, \$1,000. University scholarships; no work; maximum stipend, \$565. Assistantship, dormitory counselors, and other part-time positions. Master's in general, guidance.

Florida State University, Tallahassee, Fla. Apply for admission to Dean, Graduate School, and Registrar's Office three weeks prior to registration. Fees: resident, \$226; nr, \$350. Fellowships; no work; stipend, \$1,500-2,000 for eight months. Assistantships; one-fourth time, \$1,500 ex nr, 10 hours' work load, course load, 13 hours; first-year students eligible. Apply by May 15. Other part-time positions available. Master's and doctoral in general-experimental, clinical, human development, school. Postdoctoral in clinical, general experimental. PhD in clinical APA-approved.

Florida, University of, Gainesville, Fla. Apply for admission to Director of Admissions by August 1, and write to Head, Dept. of Psych. Tuition: resident, \$226; nr, \$576. Fellowships; no work; stipend, \$1,500-2,000 ex; nr tuition scholarships. Assistantships; 15 hours' work; stipend, \$1,900 ex nr tuition. Other part-time positions available. Apply by February 15 to Head, Dept. of Psych. MA, MS, and MA in teaching. Doctoral in clinical, counseling, general experimental, school. PhD in clinical and counseling APA-approved.

Fordham University, Bronx 58, N. Y. Apply for admission to Registrar, Graduate School of Arts and Sciences, by May 1. Tuition: approximately \$960. Assistantships; 10-12 hours' work; stipend, \$1,000 ex. Apply by March 1 to Registrar, Graduate School. Master's in experimental, psychometrics, personality-social, industrial-personnel. Doctoral in experimental, clinical, psychometrics.

Fresno State College, Fresno 26, Calif. Apply for admission to Chairman, Dept. of Psych. Tuition: Fee only. No scholarships for entering graduate students. Master's in clinical, experimental, industrial-governmental.

George Peabody College for Teachers, Nashville 5, Tenn. Apply for admission to Admission Officer and to Executive Officer, Dept. of Psych. Application papers must be complete two quarters prior to quarter of entrance. Tuition: \$650. Scholarships; no work; stipend; \$500–650; apply before March 1 to Chairman, Scholarship Committee. Assistantships; 10 hours' work; stipend, \$1,500. NIMH fellowships in mental deficiency program, school and child clinical psychology; stipend, \$1,800–3,000 ex. For fellowships and assistantships apply by March 1. Master's in guidance, educational, special education. Doctoral in counseling, experimental, child clinical, school. PhD in clinical and counseling APA-approved.

George Pepperdine College, Los Angeles 44, Calif. Apply for admission to Chairman, Graduate Academic Council by August 1. Tuition: \$27 per semester hour. Scholarships; ex from one quarter to full tuition; apply to Dean of the College. Assistantships; 10–15 hours' work; stipend, \$75 per month ex; one for 12 months; for 9 months two. Apply to Chairman, Dept. of Psych. by August 1. Master's in clinical, counseling, educational, school.

George Washington University, Washington 6, D. C. Master's applicants apply for admission to Admissions Office; Doctoral applicants to Dean, Graduate Council, by July 1. Tuition: \$30 per semester hour credit. Assistantships; 10–15 hours' work; stipend, \$540. Teaching fellowship; 15–20 hours' work; stipend, \$1,350 ex; first-year students not eligible. Research assistantships and part-time extension teaching available to several doctoral students. For assistantships and fellowships, apply to Executive Officer, Dept. of Psych. Master's in measurement, clinical, counseling, experimental, personnel, social, comparative, personality. Doctoral in measurement, abnormal, counseling, experimental, personnel, social, comparative.

Georgia, University of, Athens, Ga. Apply for admission to Dean, Graduate School, 6 weeks before any quarter. Tuition: resident, \$83 per quarter; nr, \$198 per quarter; but out-of-state tuition may be waived. Assistantships; 12-15 hours' work; stipend, \$1,800. Master's and Doctoral in general-experimental, clinical. Postdoctoral in experimental, physiological, comparative.

Harvard University, Cambridge 38, Mass. For study in the Departments of Psychology and Social Relations and for the PhD in Education, apply for admission by February 1. Men apply to Dean, Graduate School of Arts and Sciences; women apply to Graduate School, Radcliffe College, Cambridge 38, Mass. Tuition: \$1,520. For study leading to the EdD, apply by

May 1 to Committee on Admissions, Graduate School of Education. Tuition: \$1,250.

Department of Psychology: Scholarships; no work; stipend, \$200–3,200; apply to Dean, Graduate School of Arts and Sciences (Harvard or Radcliffe), by Feb. 1. Assistantships; 8–20 hours' work; stipend, \$600–2,700; first-year students eligible if qualified. Apply to Chairman, Dept. of Psychology by May 1. Doctoral and postdoctoral in experimental, physiological.

Department of Social Relations: Scholarships; no work; stipend, \$200–3,200; apply to Dean, Graduate School of Arts and Sciences (Harvard or Radcliffe), by Feb. 1. Assistantships; 8–24 hours' work; stipend, \$840–3,240; first-year students eligible up to \$1,050. USPHS in clinical, social concentrating in personality or child development; USPHS including postdoctoral in social for social science in medicine. Doctoral and postdoctoral in social, clinical. PhD in clinical APA-approved.

Graduate School of Education: Scholarships; no work; stipend, \$400–4,000. Apply to Chairman, Committee on Financial Aid, Harvard Graduate School of Education, by April 1. Research assistantships in Human Development, in Instruction, and in Guidance; stipend, \$600–2,880. First-year students ordinarily not eligible. Apply to Director, Laboratory of Human Development; Director, Lab for Research in Instruction, or Director, Harvard Studies in Career Development. Doctoral in human development, educational measurement and statistics, school, counseling, administration of guidance services.

Hawaii, University of, Honolulu 14, Hawaii. Apply for admission to Dean, Graduate School, two weeks before beginning of term. Tuition: \$190. Assistantships; 20 hours' work; stipend to \$2,000 ex. Research appointments available. NDEA fellowships. Apply by April 15 to Dean of Faculties. Master's in counseling, social, developmental industrial, experimental, psychophysics, clinical. Doctoral in general, social, developmental.

Hofstra College, Hempstead, Long Island, N. Y. Apply for admission to Dean of Admissions, by May 1. Tuition: \$35 per semester hour. Graduate assistantships; 12 hours' work; stipend, \$600; two full tuition graduate scholarships. Master's in general, industrialsocial, clinical-school.

Hollins College, Roanoke, Va. Apply for admission to Chairman, Department of Psychology. Tuition: \$850. Fellowships and assistantships; stipend, \$800-2,150 ex. Master's in general.

Houston, University of, Houston, Texas. Apply for admission to Chairman, Dept. of Psych., by March 15. Tuition: \$560. PhD traineeships in somatopsychology; stipend, \$2,400-2,800. Fellowships; 6 hours' work; stipend, \$1,000; first-year students not eligible. Assistantships; 10-20 hours' work; stipend, \$360-720. Apply by June 1. 'Master's in general, counseling, and psychometrics. Doctoral in clinical, educational, counseling, industrial, somatopsychology, general. PhD in clinical APA-approved.

Howard University, Washington 1, D. C. Apply for admission to Office of Admissions. Tuition: \$213. Scholarships and fellowships, \$247-663; apply to Dean of Graduate School, preferably by April 15. Assistantships; 15-20 hours' work; stipend, \$400-800; apply to Head of Department. Master's in general-experimental.

Idaho, University of, Moscow, Idaho. Apply for admission to Dean, Graduate School, by end of spring term. Tuition: None. Assisantships; 15 hours' work; stipend, \$1,050. Fellowships; teach 6 cr.; stipend, \$2,000. Psychometric clerk positions on an hourly basis available. Master's in general, and master's and doctor of education in guidance, counseling.

Illinois Institute of Technology, Chicago 16, Ill. Apply for admission to Office of Admissions before July 1 or December 1. Assistantships; 14 hours' work; stipend, \$1,800. Tuition scholarship. Other part-time positions available. Master's in general-experimental, industrial, preclinical. Doctoral in experimental, industrial, physiological, general.

Illinois, University of, Urbana, Ill. Tuition: resident \$200; nr, \$550. Teaching fellowships; 10 hours' work; stipend, \$2,000 ex. Fellowships; no work; stipend, \$1,500 ex; apply by February 15. Tuition scholarships. Teaching or research assistantships; 20 hours' work; stipend, \$2,000 ex.

Department of Psychology: Apply to Head of Department for admission and for fellowships by February 15, assistantships by March 1, and tuition scholarships. USPHS stipends. NDEA fellowships. NSF Cooperative Fellowships. Doctoral in general-experimental, industrial, clinical and counseling, social, personality, psychological measurement, school psychology, engineering psychology. PhD in clinical and counseling APA-approved.

College of Education: Apply to F. H. Finch, 105 Gregory Hall, for admission and for fellowships by February 15, assistantships, and tuition scholarships. Master's and doctoral in educational psychology, child development, counseling, test development and evaluation, school, education of exceptional children.

Indiana University, Bloomington, Indiana. Tuition: resident, \$7 per credit hour; nr, \$15.25 per credit

hour. Assistants and teaching associates are considered residents.

Department of Psychology: Teaching associateships; 4–6 credit hours teaching; stipend, \$2,500; research assistantships; 15 hours' work; stipends, \$2,000–2,300; graduate assistantships; 15 hours' work; stipend, \$2,000–2,300. USPHS program in clinical. Other part-time positions available. Apply by March 15 to Admissions Committee, Dept. of Psych., or Dean of the Graduate School. Master's and doctoral in experimental (with particular emphasis in learning, perception, physiological, or measurement and statistics), clinical. PhD in clinical APA-approved.

School of Education: Fellowships; no work; stipend, \$750-1,200. Assistantships; 15 hours' work; stipend, \$1,000-1,500. Teaching associateships; stipend, up to \$2,400. Apply before February 15 to Dean of Education. Counseling assistantships in men's and women's residence halls, approximately half-time work, for room, board, and remission of certain fees. Apply to Director, Counseling and Activities, Men's or Women's Halls. Master's and doctoral in educational, counseling, school.

Iowa State University, Ames, Iowa.

Department of Psychology: Apply for admission to The Graduate College, 30 days before opening of quarter. Tuition: \$36–99 per quarter. Assistantships; fee \$36 per quarter; 10–20 hours' work; stipend, \$990–1,980. Part-time industrial and personnel appointments available. Apply by April 15 to Dean, Graduate College. Master's with some specialization in: educational, developmental, industrial, guidance and counseling, measurement and evaluation, experimental.

Department of Child Development: Apply for admission to the Graduate College by March 1. Assistantships; 22 hours' work; stipend, \$2,250 with partial remission of fees. Master's with specialization in child development, family development, nursery education.

Iowa, State University of, Iowa City, Iowa. Tuition: resident, \$330; nr, \$330.

Department of Psychology: Apply for admission to the Office of the Registrar. Scholarships; stipend, ex. Fellowships; no work; stipend, \$2,000. Assistantships; 18 hours' work; stipend, \$2,100–2,500. Apply by March 1 to Dept. Psych. USPHS stipends. NDEA fellowships. Other positions available. Master's and doctoral in experimental, clinical, counseling, personnel and industrial, social. Postdoctoral in experimental, clinical, social. PhD in clinical and counseling APA-approved.

Iowa Child Welfare Research Station: Apply for admission to Chairman of Admissions, Iowa Child Welfare Research Station, by March 15. Assistantships; 20 hours' work; stipend, \$2,585–3,025, 11 months. Other positions available. Master's and doctoral in experimental-child, child-personality.

Johns Hopkins University, Baltimore 18, Md. Apply for admission to Director of Admissions by March 1. Tuition: \$1,450. Scholarships; stipend, ex. Apply by March 1 to Director of Admissions. Fellowships; stipend, \$1,800–3,000. Scholarships usually awarded with fellowships. Men preferred. Apply by March 1. Master's program predoctoral. Doctoral in physiological, social, personality and abnormal, experimental, educational, industrial, and human engineering. Postdoctoral in human engineering, physiological, experimental.

Kansas City, University of, Kansas City 10, Mo. Apply for admission to Director of Admissions by September 1. Tuition: \$22 per semester hour. Department fellowships; 20 hours' work; stipend, \$1,000, 9 mo., ex. Apply by April 1 to Chairman, Department of Psychology. Master's in pre-clinical, social-industrial, general, social.

Kansas State Teachers College of Emporia, Emporia, Kansas. Apply for admission to Chairman, Graduate Division, before registration. Tuition and fees for year: resident, \$149; nr, \$229. Fellowships: research project; stipend, \$500. Graduate assistantships; stipend, \$300–1,000. Apply by Feb. 15 to Chairman, Graduate Division. Master's in special education, school, educational, general.

Kansas State University, Manhattan, Kansas. Apply for admission to Dean, Graduate School, by August 1. Tuition: per semester, resident, \$104; nr, \$154. Assistantships; 22 hours' work; stipend, \$210–285 per month. Fellowships; stipend, \$225 per month. Apply by March 1 to Dean, Graduate School. Master's in social. industrial, counseling, general-experimental, measurement, conparative, physiological. Doctoral in industrial, counseling, general-experimental, comparative, physiological.

Kansas, University of, Lawrence, Kansas. Apply for admission to Committee on Graduate Admissions by March 31. Tuition: resident, \$140; nr, \$240. Scholarships; no work; stipend, \$600 plus incidental fee. Fellowships; no work; stipend, \$800–1,000 plus incidental fee. Apply by March 1 to Dean, Graduate School. Assistantships; 20 hours' work; stipend, \$1,900–2,000. Apply by March 1 to Committee on Graduate Admissions. USPHS stipends. Other part-time positions available. Master's and doctoral in general, social, industrial, physiological, child. Doctoral in clinical, counseling. Postdoctoral in clinical. PhD in clinical and counseling APA-approved.

Kent State University, Kent, Ohio. Apply for admission to Dean, Graduate School. Tuition: resident, \$267; nr, \$522. Assistantships; 18 hours' work; sti-

pend, \$1,200-1,900 ex. Apply by March 1. Master's in clinical, experimental, social and personality.

Kentucky, University of, Lexington, Ky. Apply for admission to Admissions Office by March 1. Tuition: resident, \$162; nr, \$364. Scholarships; stipend, \$600-2,400 ex nr. Apply by March 1 to Dean, Graduate School. Assistantships; 15-20 hours' work; stipend, \$1,200-1,800 ex nr; apply by March 1. State program in clinical. USPHS stipends. Other positions available. Master's in general, clinical, speech pathology, audiology. Doctoral in clinical, general-experimental. PhD in clinical APA-approved.

Lehigh University, Bethlehem, Pa. Apply for admission to Office of Admissions by February 15. Tuition: \$35 per credit hour. Assistantships; 20 hours' work; stipend, \$2,000 ex for first year, \$2,500 ex for second year. Other part-time positions available. Master's in industrial. Doctoral in research-oriented general.

Long Beach State College, Long Beach 4, Calif. Apply for admission to Admissions Office by September. Tuition: resident, \$45.50; nr, \$173 per semester. Credential in Pupil Personnel Services (School Psychometry and School Psychology). MA in psychology.

Long Island University, Brooklyn, New York. Apply for admission to Office of Admissions, Graduate School. Tuition: \$30 a credit. Scholarships and assistantships; stipend, \$1,500 ex. Apply to Chairman, Dept. of Psych. Master's in general-experimental, clinical, school, personnel-industrial.

Los Angeles State College, Los Angeles 32, Calif. Apply to Office of Admissions and Records by August 15. Tuition: resident, \$45; nr, \$172.50 per semester. Assistantships and part-time work available. Master's.

Louisiana State University, Baton Rouge, La. Apply for admission to Dept. of Psych. by June 1. Tuition: resident, \$120; nr, \$220. Assistantships; 10–15 hours' work; stipend, \$1,200–2,000 ex. USPHS stipends. Apply by March 15. Master's in general. Doctoral in clinical, general-experimental, personnel-industrial. Postdoctoral in clinical. PhD in clinical APA-approved.

Louisville, University of, Louisville 8, Ky. Apply for admission to Chairman, Admissions Committee, Dept. of Psych., by August 15. Tuition: resident \$262.50 per semester; nr, \$336 per semester. Tuition scholarships, research assistantships; 20 hours' work, stipend, \$1,800; clinical assistantships, 20 hours' work, stipend, \$1,800; graduate assistantships, stipend, \$300–1,000. Master's in general-experimental.

Loyola University, Chicago 11, Ill. Apply for admission to Deaa, Graduate School. Tuition: \$90 per course. Scholarships; 20 hours' work; stipend, ex for MA. Fellowships; 20 hours' work (or equivalent teaching); stipend, \$1,200–1,800 plus, for advanced students only. Assistantships; 20 hours' work; stipend, \$1,200 ex. Apply by April 1 to Dean, Graduate School. NDEA fellowships. Other part-time positions. Master's in general-experimental, clinical-personality, industrial-social. Doctoral in general-experimental, clinical-personality, industrial-social. Postdoctoral in measurement. PhD in clinical APA-approved.

Maine, University of, Orono, Maine. Apply for admission to Dean, Graduate Studies, by July 1. Tuition: resident, \$400; nr, \$800. Scholarships; no work; stipend, ex; apply by April 10 to Dean, Graduate Studies. Assistantships; 8–15 hours' work; stipend, \$1,500 ex; one assistantship for women with nursery or kindergarten experience; apply by July 1. Master's in experimental, clinical, vocational.

Marquette University, Milwaukee 3, Wis. Apply for admission to Dean, Graduate School. Scholarships, Assistants; stipend, \$1,600 ex. MA in general; MS in psychological services.

Marshall University, Huntington, W. Va. Apply for admission to Dean, Graduate School, by July 1. Tuition: resident, \$192; nr, \$492. Master's in general, pre-clinical.

Maryland, University of, College Park, Md. Apply for admission to Head, Dept. of Psych., by April 1. Tuition: \$240. Assistantships in department, Counseling Center, and contractual research; 20 hours' work; stipend, \$2,000 ex for some. Other positions available. Master's in general. Doctoral and postdoctoral in experimental, social, mental health, industrial, quantitative. PhD in counseling APA-approved.

Institute for Child Study: Fellowships for doctoral students only; stipend, \$2,000-3,000, tax-exempt. Apply by February 15, Chairman, Committee on Fellowships.

Massachusetts, University of, Amherst, Mass. Apply for admission to Dean, Graduate School, by April 1. Tuition: resident, \$100 per semester; nr, \$150 per semester. Teaching fellowships and research assistantships; up to 20 hours' work; stipend, to \$2,400 ex. NIMH traineeships and NDEA fellowships, ex. Other positions available. Apply by April 1 to Head, Dept. of Psych. Master's in general. Doctoral in child clinical, learning, personality-abnormal, physiological, sensory, engineering, social. PhD in clinical APA-approved.

McGill University, Montreal 2, P. Q., Canada. Apply for admission to Chairman, Dept. of Psych. by

February 1. Tuition: \$425. Assistantships; 8-10 hours' work; stipend, \$1,500-2,300 for eleven months. (Research assistance is normally for work on thesis.) Master's in measurement, human experimental, industrial, comparative and physiological, social, clinical. Doctoral in human experimental, comparative and physiological, industrial, measurement, social.

McMaster University, Hamilton, Ontario, Canada. Apply for admission to the Dean of Graduate Studies by September 30, but as early as possible after Febuary 1. Assistantships; stipend to \$1,800 plus tuition for MA candidates, to \$2,160 plus tuition for PhD candidates. Master's and doctoral in general experimental, child, physiological, social.

Miami, University of, Coral Gables, Fla. Apply for admission to Dean, Graduate School by August 1. Tuition: \$840. Master's assistantships; 12 hours' work; stipend, \$1,200 usually ex. Doctoral assisantships, 12 hours' work; \$2,000 usually ex. Other parttime positions available. Apply by March 1. Master's and doctoral in research, teaching psychology, school, clinical.

Miami University, Oxford, Ohio. Apply for admission to Dean, Graduate School by August 15. Tuition: resident, \$180.50; nr, \$355.50. Research or teaching assistantships; 18 hours' work; stipend, \$2,000, ex of \$100 registration, and ex nr fee. Other part-time positions available. Master's in general, experimental, clinical, school.

Michigan State University, East Lansing, Mich. Apply for admission to Committee on Admissions.

Department of Psychology: Tuition: 7-9 cr, resident \$61, nr \$157; 10-11 cr, resident \$81; nr \$210; over 11 cr, resident \$93; nr \$250, per term. Fellowships; stipend, nr ex. Apply to Registrar. Research and teaching assistantships in Dept. of Psych. (apply to the Committee on Admissions); and the Labor and Industrial Relations Center (apply to the Director); 20 hours' work; stipend, \$2,000-2,800, nr fees ex. USPHS and NSF stipends. Other positions available. Master's in experimental, social and personality, child and developmental, tests and measurements, industrial, social. Doctoral in experimental, child and developmental, tests and measurements, social and personality, clinical, counseling, industrial, school, social. PhD in clinical APA-approved.

College of Education: Complete application by March 1 to Dean, College of Education. Several teaching assistantships, ½ time; stipend, nr fee ex. MA and PhD (College of Education) in educational psychology, guidance and counseling, educational tests and measurements, child growth and development, school.

Michigan, University of, Ann Arbor, Mich. Apply for admission to Chairman, Committee on Graduate Studies, Dept. of Psych., by February 15. Tuition: resident, \$280; nr. \$750. Scholarships; no work; stipend, ex. Fellowships; no work; stipend, \$1,600-3,000. Apply by February 1 to Horace H. Rackham School of Graduate Studies. Research or teaching assistantships; 12-20 hours' work; stipend, \$1,350-3,000. Teaching fellowships: 20 hours' work: stipend, \$2,200 part ex. Research fellowships; stipend to \$3,000. USPHS stipends. Other part-time positions available. Doctoral and postdoctoral in general, experimental (including physiological and sensory, learning, perception. engineering psychology), social, personality, clinical, counseling, educational tests, mathematical, industrial. PhD in clinical and counseling APA-approved.

Mills College, Oakland 13, Calif. Apply for admission to Director of Graduate Study. Fellowships; 12-18 hours' work; stipend, \$1,275 ex. Master's in clinical.

Minnesota, University of, Minneapolis 14, Minn. Apply for admission to Graduate School at any time. Tuition and fees; resident, \$273; nr, \$660. Assistants pay resident tuition.

Department of Psychology: Teaching assistantships; 12–20 hours' work; stipends, \$1,057–2,115. Apply by February 15. Research assistantships; 20 hours' work; stipend, \$2,115. USPHS and NDEA stipends. OVR counseling traineeships; stipend, \$1,800–3,400. Other part-time positions available. Master's and doctoral in all fields of pyschology. PhD in clinical and counseling APA-approved.

Department of Educational Psychology: Teaching, research, and student personnel assistantships; stipend, \$1,058-2,115, work ¼ to ½ time. OVR counseling fellowships; stipend, \$2,000 fees exempt, no work. VA counseling traineeship; stipend, \$2,490-3,515, work ½ time. School psychology fellowships; stipend, \$1,800, no work. Other part-time positions available. Two-year Specialist Certificate school psychological work, student personnel work. Apply Dean, College of Education, by February 15. Master's and doctoral in educational, counseling, school counseling, student personnel work, school psychology services, educational research.

Institute of Child Development: Assistantships; 20 hours' work; stipends, \$2,115. Training stipends for research in child psychology. \$1,800-2,400 ex. Other research appointments available. Apply by February 15th to the Director. Master's and doctoral in child, development. Postdoctoral in clinical, experimental-child.

Mississippi Southern College, Hattiesburg, Miss. Apply for admission to Director of Admissions. Fellowships; limited work; stipend, \$800. Apply to Dean of Graduate School. Master's, doctoral.

Mississippi, University of, University, Miss. Apply for admission to Dean, Graduate School, by August 1. Tuition: resident, \$260; nr, \$660. Scholarships; no work; stipend, \$1,650 ex nr fee; apply to Dean, Graduate School, by March 1. Assistantships; 9-12 hours' work; stipend, \$600-2,000 ex nr fee; apply by July 1. Master's in experimental, physiological and comparative, clinical. Doctoral and postdoctoral in general, clinical-experimental.

Missouri, University of, Columbia, Mo. Apply for admission to Director of Admissions and to Chairman, Dept. of Psych., or Chairman, Graduate Dept. of Education by May 1 or November 1. Tuition: resident, none; nr, none for graduate work; but fees are \$215. Fellowships; stipend, \$1,000. Apply by March 1 to Dean, Graduate School.

Psychology Department: Teaching assistantships, research assistantships, internships, instructorships, counselors; part-time; stipend, \$1,600–2,000; apply by April 1 to Dept. Chairman. USPHS stipends. NDEA fellowships. Master's in general, child guidance, psychometrics, teaching. Doctoral in experimental, personality, counseling, clinical, social. PhD in clinical and counseling (jointly with Dept. of Education) APA-approved.

Graduate Department of Education: Teaching assistantships, research assistantships, internships, counselors; part-time; stipend, \$1,250–1,800; apply by May 1 'to Chairman, Grad. Dept. of Education. NDEA fellowships. Master's and doctoral in educational, counseling, student personnel. PhD in counseling (jointly with Psychology Department) APA-approved.

Montana State University, Missoula, Mont. Apply for admission to Dean, Graduate School, by September 1. Tuition: resident, \$222; nr, \$372. Assistantships; 12 hours' work; stipend, \$1,600 ex for nine months. Apply by April 15 to Dean, Graduate School. Master's in clinical, general.

Montréal, Université de, Montréal 2, P. Q., Canada. Apply for admission to Institut de Psychologie by June 1. Tuition: resident, \$375; nr, \$450. Scholarships and fellowships; no work; stipend, \$3,000. Apply by May. Assistantships; 15 hours' work; first-year students not eligible. Master's and doctoral in clinical, industrial, experimental, pastoral, developmental, delinquency and criminality, human relations and social. Postdoctoral, in clinical.

Nebraska, University of, Lincoln, Neb. Apply for admission to Dean, Graduate College, by March 15. Tuition: resident, \$120; nr. \$240.

Department of Psychology: Assistantships 12 hours' work; stipend, minimum of \$1,600-1,800 ex; apply by March 15. USPHS stipends. Other positions available. Doctoral in general-experimental, clinical, counseling. PhD in clinical and counseling APA-approved.

Department of Educational Psychology and Measurements: Assistantships and instructorships. Doctoral in counseling, developmental, special education, psychometrics. PhD in counseling (jointly with Dept. of Psych.) APA-approved.

Nevada, University of, Reno, Nev. Apply for admission to Director of Admissions by March 1. Tuition: resident, none; nr, \$300. Apply to P. F. Secord for research assistantships 10-20 hours' work; stipend, \$1,200-2,000 ex. Master's in general, social, preclinical.

New Brunswick, University of, Fredericton, N. B., Canada. Apply for admission to Dean of Graduate School, by May 1. Tuition: \$360. Assistantships; 6 hours' work; stipend to \$1,000. Apply by May 1 to Dean of Graduate School. Master's in experimental, social.

New Hampshire, University of, Durham, N. H. Apply for admission to Dean, Graduate School. Tuition: resident, \$380; nr, \$800. Scholarships; no work; stipend, ex. Assistantships; 20 hours' work; stipend, \$1,800 ex. Apply by April 1 to Chairman, Dept. of Psych. Master's in general with emphasis on clinical.

New Mexico Highlands University, Las Vegas, N. M. Apply for admission to Registrar at least one month before fall registration. Tuition: resident, \$55 pez quarter; nr, \$90 per quarter; matriculation fee, \$5. Assistantships; 8–20 hours' work; stipend, \$800–2,000 ex, nr fee. Apply by May 15 to Head, Psych. Dept. Master's in general.

New Mexico State University, University Park, N. M. Tuition: resident, \$180; nr, \$360. Apply for admission to Dean, Graduate School, at least one month before entrance. Assistantships; 20 hours' work; stipend, \$1,900-2,400 ex. Apply by March 15 to Head, Psych. Dept. Master's in general experimental.

New Mexico, University of, Albuquerque, N. M. Apply for admission to Dean, Graduate School, one month before registration date. Tuition: resident, \$123; nr, \$238. Assistantships; 15-20 hours' work; stipend, \$1,900 ex nr fee; apply by March 1 to Dean, Graduate School. Master's and doctoral in general.

New School for Social Research, Graduate Faculty of Political and Social Science, New York 11, N. Y. Apply for admission to Admissions Office, Graduate Faculty. Tuition: \$35 per credit point. Scholarships; NDEA fellowships; stipend, ex; apply by April 30 to

Graduate Faculty Registrar. Assistantships; 20 hours' work; stipend, \$1,800 ex; first-year students not eligible; apply to Chairman, Graduate Psych. Dept. Master's and doctoral in general-experimental, emphasizing the fields of social, personality, perception, learning, motivation.

New York University, New York 3, N. Y.

Department of Psychology, Graduate School of Arts and Sciences: Apply for admission to Head, Dept. of Psych., by February 15. Tuition: \$1,200 (\$240 per full course). Scholarships and fellowships. USPHS stipends. Assistantships; 20 hours' work; stipend, \$2,000 ex for three courses a year; apply by February 1. Other positions available. Doctoral in clinical, social, general-experimental, physiological-comparative, industrial. Postdoctoral in personality research. Postdoctoral program; modernization and refresher courses in general-experimental, industrial, personality, clinical. Sequence of courses in psychotherapy. PhD in clinical APA-approved.

Department of Educational Psychology, School of Education: Apply for admission to Dean of Admissions, School of Education, 90 days before admission. Assistantships. Doctoral in educational, school.

North Carolina State College, Raleigh, N. C. Apply for admission to the Dean, Graduate School, thirty days before opening of semester. Tuition: resident, or nonresident with assistantship, \$278; nonresident without assistantships, \$628. Assistantships; 20 hours' work; stipend, \$2,000–2,400; 12 hours' work, stipend, \$1,200 and up. Master's in industrial, applied experimental, school, college teaching of psychology.

North Carolina, University of, Chapel Hill, N. C. Apply for admission to Dean, Graduate School, by February 15. Tuition: resident, \$175; nr, \$600. Teaching and research assistantships; 10–20 hours' work; stipend, \$2,000–2,400 ex nr. Apply by February 15 to Dean, Graduate School. USPHS stipends. Other positions available. Master's and doctoral in general-experimental. Master's, doctoral, and postdoctoral in social, psychometric, clinical. PhD in clinical APA-approved.

North Dakota, University of, Grand Forks, N. D. Apply for admission to Dean, Graduate School, two months before admission. Tuition: per semester, resident, \$60; nr, \$135. Teaching assistantships; stipend, \$1,800 ex. Scholarships and fellowships; stipend, \$500–1,000 ex; for residents only. NDEA fellowships. NIMH research fellowships. Master's in general-experimental. Doctoral in general-experimental, clinical, counseling and guidance.

North Texas State University, Denton, Texas. Apply for admission to Chairman, Dept. of Psych., by April 1. Tuition: resident, \$138; nr, equal rate reciprocity with other state universities. Fellowships; teach one course; stipend, \$900. Assistantships; stipend, approx. \$300. Apply by April 1. Master's in preclinical, guidance-counseling, personality.

Northwestern University, Evanston, Ill. Apply for admission to Dean, Graduate School. Tuition: \$900. Scholarships; no work; stipend, \$900. Fellowships; no work; stipend, \$1,500 ex. Assistantships; 12–15 hours' work; stipend, \$1,800 ex. Apply by March 1 to Dean, Graduate School. USPHS stipends. Other part-time positions available. Doctoral in experimental, physiological, social, clinical. Postdoctoral in experimental and clinical. PhD in clinical APA-approved.

Oberlin College, Oberlin, Ohio. Apply for admission to Dean. Tuition: \$1,150. Scholarship; no work; stipend, ex; apply by March 15 to Dean, College of Arts and Sciences. Assistantship; 10-17 hours' work; stipend, \$1,800 ex half-schedule; apply by March 15. Master's in experimental.

Occidental College, Los Angeles, Calif. Apply for admission to Chairman, Dept. of Psych., before April 15. Tuition: \$800. Master's in experimental, preclinical counseling, psychological testing.

Ohio State University, Columbus 10, Ohio, Apply for admission to Entrance Board by February 1. Tuition: resident, \$300; nr, \$675. Fellowships; no work; stipend, first-year students, \$1,800, others higher. Apply to Graduate School by February 15. Assistantships; 25 hours' work; stipend, \$1,917. First-year students rarely eligible. Assistantships; 15 hours' work; stipend, \$1,305; first-year students eligible; apply by February 1. Research assistantships also available. USPHS stipends. Other positions available. All students pay resident fee of \$300, but those on university appointment are exempt from the additional nonresident fee of \$375. Master's and doctoral in clinical, industrial, counseling, educational, social, developmental, exceptional children, experimental, human engineering, physiological, statistical. PhD in clinical and counseling APA-approved.

Ohio University, Athens, Ohio. Apply for admission to Dean, Graduate College, by March 1. Tuition: resident, \$350; nr, \$700. Assistantships; 18 hours' work; stipend, \$1,800 ex for first-year students and \$2,000 ex for second-year students. Other positions available. Master's in general-experimental, clinical, counseling, industrial, school.

Oklahoma State University, Stillwater, Okla. Apply for admission to Dean, Graduate School, before April 1. Tuition: resident, \$168; nr, \$264. Assistant-

ships; teaching and research; 6 hours' work; stipend, \$1,440-1,800. Federal traineeship in mental retardation, educational psychology, vocational rehabilitation; stipends, \$1,800-4,000. Apply by April 1. Master's, doctoral, and postdoctoral.

Oklahoma, University of, Norman, Okla. Apply for admission to Office of Admissions and Records by March 15. Tuition per credit hour: resident, \$6, nr, \$18. Assistantships; 20 hours' work; stipend, \$1,800-2,000. NIMH fellowships. FAA aeromedical research assistantships. Master's in experimental-theoretical. Doctoral in experimental-theoretical, clinical. PhD in clinical APA-approved.

Omaha, University of, Omaha 1, Neb. Apply for admission to Dean, Graduate Division, preferably one month prior to first day of class. Tuition: resident, \$375; nr, \$600. Assistantships; 20 hours' work; stipend, \$1,600 ex. Other part-time positions available. Apply by March 1 to Dean. Master's in industrial, educational, general.

Oregon, Univerity of, Eugene, Ore. Apply for admission to Office of Admissions. For fellowships and assistantships apply to Chairman, Dept. of Psych. by March 7. Tuition: \$270 (\$102 for assistants and fellows). Teaching assistantships and fellowships; 12–14 hours' work; stipend, \$1,800–2.000. Research assistantships; stipend to \$2,400. NIMH stipends. OVR counseling traineeships. Master's in general-experimental, rehabilitation counseling, school. Doctoral in general-experimental, quantitative, social, personality, counseling, clinical. Postdoctoral in comparative, personality, counseling, clinical, quantitative. PhD in clinical and counseling APA-approved.

Ottawa, University of, Ottawa, Ont., Canada. Apply for admission to the Registrar by June 1. Tuition: \$400 approximately. Assistantships; approximately 20 hours' work; stipend, \$1,000; first-year students not eligible; part-time teaching positions; apply by April 1. Master's in psychology and education; and doctoral in clinical, counseling, educational, child.

Pacific Univerity, Forest Grove, Ore. Apply for admission to Director of Admissions. Tuition: \$675. Master's in clinical, visual.

Pennsylvania State University, University Park, Pa. Apply for admission to Dean of Admissions by April 1.

Department of Psychology: Tuition: resident, \$240 per semester; nr, \$480 per semester. Fellowships; no work; stipend, \$1,800-2,400 ex. Assistantships; 10-20 hours' work; stipend, \$900-2,400 ex. USPHS stipends. Master's and doctoral in general, experimental, educational, developmental, business, industrial, engineering.

physiological, comparative, social, clinical, counseling, school, measurement. Postdoctoral program. PhD in clinical and counseling APA-approved.

Department of Child Development and Family Relationships: Tuition: resident, \$160 per term; nr, \$320 per term. Research assistantships; 20 hours' work; stipend, \$1,710 ex. Teaching assistantships; 20 hours' work; stipend, \$1,710 ex. Other positions available. Apply by April 1 to Dean, College of Home Economics. Master's and doctoral in child development and family relationships.

Pennsylvania, University of, Philadelphia 4, Pa. Apply for admission to Dean, Graduate School, by February 18. Letter to Dept. Chairman also required. Tuition: \$1,400. Scholarships; no work; stipend, ex—\$400 ex. Fellowship; no work; stipend, \$200–2,000 ex. Apply by February 18 to Dean, Graduate School. Assistantships; up to 20 hours' work; stipend, up to \$2,500 ex; apply by February 18 to Chairman, Dept. of Psych. USPHS and NSF stipends. Other positions available. Doctoral in experimental, physiological, mathematical, social, clinical, industrial. PhD in clinical APA-approved.

Pittsburgh, University of, Pittsburgh 13, Pa. Apply for admission to Chairman, Admissions Committee, by March 1. Tuition: \$28 per semester credit hour. University scholarship; no work; stipend, \$2.500. Fellowships; no work; stipend, \$1,500. Research assistantships; 20 hours' work; stipend, \$1,530–2,000 occasionally ex. Teaching assistantships; 6 class hours' work; stipend, \$1,200 ex; first-year students below MA level not eligible. Research assistantships in physiological and comparative; stipend, \$3,200. USPHS stipends. NDEA fellowships. Apply by March 1. Master's and doctoral in general-experimental, educational, social, clinical, measurement, industrial. Postdoctoral in experimental and physiological. PhD in clinical APA-approved.

Portland, University of, Portland 3, Ore. Apply for admission to Dean, Graduate School. Tuition: \$20 per credit hour. Scholarships; 0-5 hours' work; stipend, ex. Scholarships; 0-10 hours' work; stipend, \$600 ex. Assistantships; 10-12 hours' work; stipend, \$900-1,200 ex. First-year students usually not eligible for assistantships. Counseling assistantships in men's and women's residence halls, approximately half-time work, for room, board, remission of fees. Apply by April 15. Master's and doctoral in clinical, general-experimental.

Princeton University, Princeton, N. J. Apply for admission to Dean, Graduate School, by February 21. Tuition: \$1,250. Scholarships; no work, stipend to \$1,250. Fellowship; stipend, \$1,250-3,000. Assistant-

ships; maximum 20 hours' work; stipend, \$2,450. Apply with application for admission. Educational Testing Service fellowships; 15 hours per week in-service training; stipend, \$3,750. Apply by January 6 to Director, Psychometrics Program, Educational Testing Service. Master's not specialized. Doctoral in general psychology with opportunity for specialization in physiological and experimental, social, psychometrics, personality and abnormal, industrial. Postdoctoral may be arranged.

Purdue University, Lafayette, Ind. Apply for admission to Dean, Graduate School, by March 1.

Department of Psychology: Tuition: resident, \$240; nr, \$615. Fellowships; no work; stipend, \$1,600 ex except \$79; first-year students only. Assistantships; 20 hours' work; stipend, \$2,000-2,300 ex except \$79. Apply to Dean, Graduate School, by March 1. USPHS stipends. Others positions available. Master's in experimental, child, clinical, industrial, human factors, educational, measurement, social. Doctoral in industrial, clinical, counseling, human factors, child clinical, experimental, measurement, educational. Postdoctoral in clinical. PhD in clinical and counseling APA-approved.

Department of Child Development and Family Life: Tuition: resident, \$240; nr, \$615. Fellowships; no work; stipend, \$1,600 ex except \$79; first-year students. Teaching assistantships; 20 hours' work; stipend, \$1,800 ex except \$79. Research assistantships; 20 hours' work; stipend, \$1,600-1,800 ex except \$79. Apply by March 15 to Dean, School of Home Economics. Master's and doctoral in child development and family life.

Queen's University, Kingston, Ontario, Canada. Apply to the Registrar before March 1. Tuition: \$350. Graduate fellowships; stipend, \$1,200–1,800. Assistantships; 6–12 hours' work during 25 weeks of session, stipend, \$500–1,000. Summer assistantships; stipend, \$800–1,400 for 4 months' work. Master's and doctoral in general-experimental, social, psychometric, clinical.

Radcliffe College, Cambridge, Mass. See Harvard University.

Richmond Professional Institute of the Colleges of William and Mary, Richmond, Va. Apply for admission to Chairman, Department of Clinical and Applied Psychology. Tuition: resident, \$360; nr, \$550. Fellowships; 8-10 hours' work; stipend, \$1,200; first-year students not eligible. Assistantships; 8-10 hours' work; stipend; \$250-500. Dormitory managers (male) provided room, board, and tuition. Apply to Chairman, Department of Clinical and Applied Psychology by June 1. Other part-time positions available. Master's in clinical, applied.

Richmond, University of, Richmond, Va. Apply for admission to Dean, Graduate School. Assistantships available in Dept. of Psychology and the Center for Psychological Services; stipend, up to \$1,200. Master's in general, with some specialization in experimental, clinical, industrial.

Rochester, University of, Rochester 20, N. Y. Apply for admission to Office of Graduate Admissions. Tuition: \$43 per credit hour. Scholarships; no work; stipend, ex; first-year students eligible. Fellowships; no work; stipend, \$1,500-3,000. Assistantships; 15 hours' work; stipend, \$1,700 and up ex. USPHS stipends in clinical and in physiological. Summer work usually available. Apply by March 1. Doctoral and postdoctoral in experimental, physiological, vision, social, personality, child, clinical, tests and measurements, industrial, applied experimental. PhD in clinical APA-approved.

Roosevelt University, Chicago 5, Ill. Apply for admission to Director of Admissions by Aug. 1. Tuition: \$24.50 per sem. hr. Full tuition scholarships. Apply to Dean, Graduate School by March 1. For departmental assistantships, apply to dept. chairman. Master's with core program in general-experimental or clinical.

Rutgers, the State University, New Brunswick, N. J. Tuition: \$13.50 per credit hour or \$200 per semester. Graduate School: Apply for admission to University Admissions Office. Assistantships; 15 hours per week maximum; stipend, \$2,262 ex. Apply to Chairman, Graduate Faculty for Psychology. Tuition scholarships; apply to Dean of the Graduate School. Master's and doctoral in general-experimental, clinical, social.

School of Education: For admission and assistantships, apply to Assistant Dean, Graduate School of Education. Master and Doctor of Education in educational, school, measurement, guidance.

Sacramento State College, Sacramento, Calif. Apply for admission to Admissions Officer by September 15. Tuition: \$48 per semester. Readerships; pyschometric assistantships; part-time instructorships; apply to Dept. of Psych. Master's.

St. John's, University of, Jamaica 32, L. I., N. Y. Apply for admission to Dean, School of Education by March 15. Tuition: \$750. No residence facilities. Scholarships. Fellowships; 6–9 hours' teaching; stipend, \$2,000–2,400 plus \$400 for each dependent. Assistantships; 12 hours' work; stipend, \$1,200–1.600. Master's and doctoral program.

St. Louis University, St. Louis 3, Mo. Apply for admission to Dean, Graduate School, before April 1.

Tuition: \$25 per semester hour. Fellowships; 20 hours' work; stipend, \$2,000. Assistantships; 20 hours' work; stipend, \$1,700. NDEA fellowships. Apply by April 1 to Dean, Graduate School. Master's and doctoral in experimental, clinical.

San Diego State College, San Diego 15, Calif. Apply for admission to the Director of Admissions. Tuition: resident, \$46; nr, \$173.50 per semester. No stipends available. Part-time work available. Master's.

San Francisco State College, San Francisco, Calif. Apply to Graduate Coordinator in Psychology by March 15. Apply to (1) Office of Admissions and (2) Graduate Study Cifice by August 1. Tuition: resident, \$43; nr, \$137.50 per semester. Master's in all major fields of psychology; state credentials in psychometry, school, junior college teaching.

San Jose State College, San Jose, Calif. Apply for admission to Admission Office and Graduate Coordinator of Psych. Dept. Tuition per semester: resident, \$40.50; nr, \$127.50. Part-time assistantships; \$800-2,200. MA in general and MS in applied.

Sarah Lawrence College, Bronxville 8, N. Y. Apply for admission to the Office of the Dean before May 1. Tuition: \$700. No scholarship funds available. Master's in child development and early childhood education.

Saskatchewan, University of, Saskatoon, Sask., Canada. Apply for admission by Sept. 1 on forms supplied by the Registrar. Tuition: \$175 for classes prescribed for the Master's Course. Scholarship; no work; stipend, \$1,000. Departmental readerships and assisantships; 3–10 hours' work; stipend, \$100 to \$500. Apply by September 1 to head of the Dept. Master's in general, with some specialization.

Smith College, Northampton, Mass. Women only. Apply for admission to Secretary to the Committee on Graduate Study. Tuition: \$850. Scholarships. Fellowships; no work; stipend, \$1,000-2,000. Assistantships; 20 hours' work; stipend, \$1,800 ex. Master's.

South Carolina, University of, Columbia, S. C. Apply for admission to Dean, Graduate School, by September 1. Tuition: resident, \$80; nr, \$250. Fellowships; no work; stipend, \$300–600; apply by April 1 to Dean, Graduate School. Assistantship; stipend, \$1,000 plus nr fee. Other part-time positions available. Apply by June 1. Master's in general, clinical.

South Dakota, University of, Vermillion, S. D. Apply for admission to Dean, Graduate School. Tuition: per semester, resident, \$150; nr, \$270. Assistantships; 12-15 hours' work; stipend, \$1,500-1,800. Re-

search assistantships; 20 hours' work; 12 months; stipend, \$2,000-2,500. Apply to Chairman, Dept. of Psych., before April 15. Master's in experimental, clinical-counseling, developmental, school.

Southern California, University of, Los Angeles, Calif. Apply for admission to Head, Dept. of Psych. by March 1. Tuition: \$32 per unit. Scholarships; stipend, ex; 14 units per semester; apply to Graduate School before February 15. Assistantships; 15–20 hours' work; stipend, \$760–2,400; apply by March 1. USPHS stipends. Other part-time positions available. Master's in theoretical, business and industrial, psychological measurements. Doctoral in clinical, theoretical, business and industrial, psychological measurements. Postdoctoral in clinical. PhD in clinical APA-approved.

Southern Illinois University, Carbondale, Ill. Apply for admission to Chairman, Psych. Dept. and Dean of Graduate School. Tuition: resident, \$164; nr, \$308. Fellowships; 10 hours' work; stipend, \$810–1,250 ex. Teaching assistants; 20 hours' work; \$1,620–2,160 ex. Research assistants; 10–20 hours' work; \$810–2,160 ex. Additional training appointments: clinical center, psychological clinic, counseling and testing; mental hospital; stipend, \$1,620–2,160 ex. Master's and doctoral in clinical, counseling, industrial, general.

Southern Methodist University, Dallas 5, Texas. Apply for admission to Dean, Graduate School. Tuition: \$650. Scholarships; 3 hours' work; stipend, ex; apply to Dean, Graduate School. Fellowships: Dreyfuss (industrial); stipend, \$750 per semester; teaching; stipend, \$700 ex per semester; apply to Chairman, Dept. of Psych. Master's in experimental, industrial, preclinical (counseling and psychometrics).

Springfield College, Springfield 9, Mass. Apply for admission to Director of Graduate Study by June 15. Tuition: \$32 per semester hour. Scholarships depend upon need and qualification of student. Assistantships; 12 hours' work; stipend, \$450. Teaching assistantships; stipend, \$600. OVR stipends in rehabilitation counseling, \$1,800; apply to Director of Graduate Study by May 15. Master's in counseling, personnel administration, rehabilitational counseling.

Stanford University, Stanford, Calif. Apply for admission to Stanford Graduate Admissions Office. Tuition: \$1,260. Graduate scholarships and fellowships available through the Graduate Admissions Office. Research and teaching assistantships; 20 hours' work; stipend, \$2,602; apply by March 15. USPHS stipends. Other positions occasionally available. Doctoral and postdoctoral in developmental, clinical, perception and

learning, physiological and comparative, psychometrics, social and personality, industrial. PhD in clinical APA-approved.

Syracuse University, Syracuse 10, N. Y. Apply for admission to Dean, Graduate School, at any time. Tuition: \$1,200 or \$40 per credit hr. Assistantships; 20 hours' work; stipend, \$1,600 for academic year, 9 cr. hrs. tuition ex per semester. Assistantships; 20–30 hours' work; stipend, \$1,800–2,700 for calendar year, 9 cr. hrs. tuition ex per semester. Psychological Research Center assistantships on calendar year; stipend, \$2,200, 9 cr. hrs. tuition ex per semester. USPHS stipends in clinical, physiological. Apply by March 1 to Chairman, Psych. Dept. Master's unspecialized except for school psychology. Doctoral in clinical, general experimental, educational, developmental, social, measurement and statistics. PhD in clinical APA-approved.

Temple University, Philadelphia 22, Pa. Apply for admission for MA to Dean, College of Liberal Arts and Sciences; for PhD to Chairman, Dept. of Psych., and for MEd and DEd to Dean, Teachers College, by April 1. Tuition: \$25 per semester hour. Assistantships; half-time; apply by April 1. USPHS and NIMH fellowships available. MA in general. PhD in clinical, counseling, reading, general. MEd and DEd in educational, school, counseling and guidance, reading. PhD in clinical and counseling APA-approved.

Tennessee, University of, Knoxville, Tenn. Apply for admission to Dean, Graduate School, by April 1. Tuition: resident, \$225; nr, \$525. Assistantships; 11 hours' work; stipend, \$900–1,125 ex; 22 hours' work; stipend, \$1.800–2,250 ex; apply to Dean, Graduate School, by March 15. Other positions available. Master's and doctoral in general, industrial, clinical. Post-doctoral in clinical. PhD in clinical APA-approved.

Texas Christian University, Fort Worth, Texas. Apply for admission and assistantships to Dean, Graduate School. Tuition: \$20 per semester hour. Assistantships; 8 hours' work per week; stipend, \$550. Fellowships; work quarter-time; stipend, \$2,400–2,600. Apply by May 1. Master's and doctoral in general-experimental, psychometrics, social, abnormal, physiological, developmental.

Texas Technological College, Lubbock, Texas. Apply for admission to Head, Dept. of Psych., by May 1. Tuition: resident, \$100; nr, \$400. Research assistantships, comparative and experimental; 20 hours' work; stipend, \$1,000-1,800. Traineeships in rehabilitation counseling; no work; stipend, \$1,800 for first-year students, \$2,400 for second-year students. Master's and doctoral in counseling, experimental.

Texas, University of, Austin, Texas.

Department of Psychology: Apply for admission to Secretary, Dept. of Psych. Tuition: resident, \$50 per semester; nr, \$200 per semester. Scholarships; no work; stipend, \$1,800-2,400 ex; apply by March 1 to Dean, Graduate School. Teaching assistantships; 20 hours' work; stipend, \$1,600-2,000 ex. Apply to Secretary, Dept. of Psych. Scholarships; stipend, ex. Apply at time of registration to Dean, Graduate School. USPHS stipends. Research assistantships and employment opportunities. Master's and doctoral in experimental, clinical, developmental, counseling (combined with educational), physiological and social. Post-doctoral in physiological. PhD in clinical and counseling APA-approved.

Department of Educational Psychology: Apply for admission to Chairman, Dept. of Educational Psych. Tuition: resident, \$50 per semester; nr. \$200 per semester. University fellowships; no work; stipend, \$1,800-2,400 ex. Predoctoral internships in college teaching; half-time load, stipend, \$2,700. Teaching assistantships; half-time load; stipend, \$1,600-3,000. Departmental fellowships; stipend, \$1,500-2,000. Apply to Chairman, Department of Educational Psychology, by March 1. United States Office of Education Fellowships (Education of the Mentally Retarded); stipend, \$2,000-2,800 plus allowances. United Cerebral Palsy Research and Educational Foundation Fellowships (Exceptional Children); stipend, \$2,400-4,800. Research assistantships and counseling internships; varying stipends. Tuition scholarships available; apply to Dean of Graduate School at time of registration. Master's and doctoral in counseling-guidance-personnel, developmental-social, learning, psychometrics and quantitative methods, special education, audio-visual, PhD program emphasis on preparation for college teaching and research. PhD in counseling (with Dept. of Psych.) APA-approved.

Toledo, University of, Toledo 6, Ohio. Apply for admission to Graduate Division, at any time. Tuition: Toledo resident, \$255 per semester; nr, \$345 per semester. Teaching Fellows and Research Assistants; 20 hours' work; stipend, \$2,000 ex. Lecturers and Assistants in Adult Education evening session courses; \$1.50-10.00 per classroom hour. Part-time laboratory, clerical, and research assistants, \$.75-1.00 per hour. Students in Industrial Therapy program eligible for stipend, \$2,000 ex. Apply any time. Master's in general, industrial, psychology of reading, industrial therapy, personality, gerontology.

Toronto, University of, Toronto, Ontario, Canada. Apply for admission to Secretary, School of Graduate Studies, by March 1. Tuition: \$343. Teaching and research assistantships; stipend, to \$1,500 for eight

months. Apply by April 1. Master's and doctoral in experimental, child development, social and personality, clinical.

Tufts University, Medford 55, Mass. Apply for admission to Dean, Graduate School, by March 15. Tuition: \$40 per credit hr. plus \$10 registration fee. Scholarships; no work; stipend, ex. Fellowship in aviation psych.; stipend, \$1,500 ex. NDEA fellowships. Assistantships; 20 hours' work; stipend, \$1,800–2,400 ex. Other part-time positions available. Master's in general or applied experimental. Doctoral and post-doctoral in general experimental.

Tulane University of Louisiana, New Orleans, La. Apply for admission to Dean, Graduate School, by June 1. Tuition: \$750. Scholarships; no work; stipend, \$400–1,000. Fellowships; no work; stipend, \$1,500; first-year students not eligible. Assistantships; 12 hours' work; stipend, \$1,200–1,800 ex. Apply by February 1 to Dean, Graduate School. Master's and doctoral in experimental. Postdoctoral in learning and motivation.

Tulsa, University of, Tulsa, Okla. Apply for admission to Dean, Graduate School. Tuition: \$495 for 2 semesters. Scholarships; stipend to \$2,200. Fellowships; stipend, \$1,800. Assistantships; 12 hours' work; stipend, \$1,000 for 8½ months. Master's in general, industrial, preclinical.

Utah State University, Logan, Utah. Apply for admission to Dean, Graduate School, by July. Tuition and fees; resident, \$180; nr, \$180 with assistantship, \$285 without. Assistantships; 10 hours' work; stipend, \$500-1,200. Apply by July. Master's in general, clinical, counseling, educational. EdD in educational.

Utah, University of, Salt Lake City, Utah.

Department of Psychology: Apply for admission to Dean, Graduate School, or Chairman, Dept. of Psych., by June 1. Tuition: resident, \$250 approx.; nr, \$450 approx. Assistantships; hours of work vary; stipend, \$450-750 ex out-of-state fee; apply by August 1. Research appointments available. USPHS stipends. Master's in industrial, developmental, social, general and experimental, physiological and comparative. Doctoral in clinical, counseling, industrial, general and experimental, child and developmental, social, physiological and comparative. Postdoctoral in clinical. PhD in clinical and counseling APA-approved.

Department of Educational Psychology: Apply for admission to Chairman, Dept. of Educational Psych. Tuition: resident, \$275; nr, \$450. University fellowships; no work; stipend, \$1,200–1,800. Rehabilitation counseling traineeships; stipend, \$1,800–2,100. Research assistantships and internships available; varying stipends. Master's and doctoral in counseling-guidance,

student personnel, school psychology, reading, rehabilitation counseling, educational research. PhD in counseling (jointly with Dept. of Psych.) APA-approved.

Vanderbilt University, Nashville, Tenn. Apply for admission to Dean, Graduate School, by February 15. Tuition: \$375 per semester. Scholarships; no work; stipend, \$1,000–2,000 ex. Fellowships; 10–20 hours' work; stipend, \$1,000–1,500 ex. Assistantships; 10–20 hours' work; stipend, \$1,000–1,600 ex. USPHS and OVR stipends. Other positions available. Doctoral in clinical, tests and measurements, physiological, general-experimental. Postdoctoral in clinical, experimental. PhD in clinical APA-approved.

Vassar College, Poughkeepsie, N. Y. Apply for admission to Dean before March 1. Tuition: \$525. Fellowships; stipend, \$1,500 ex. Assistantships; 30 hours' work; stipend, \$2,200 ex. Women only. Apply by March 1 to Dean. Master's in general and experimental, personality, social.

Vermont, University of, Burlington, Vt. Apply for admission to Dean of the Graduate School. Fellowship; stipend, \$500 ex. Assistantship; stipend, \$1,800 ex. Master's in experimental, social, tests.

Virginia, University of, Charlottesville, Va. Apply for admission to Dean, Graduate School, by June 1. Tuition and fees: resident, \$371; nr, \$666. Fellowships; no work; stipend, \$750-1,500 ex; apply by March 1 to Dean, Graduate School. Assistantships; 6-15 hours' work; stipend, \$700-1,700; apply by June 1. Full-time summer research assistantships available. NDEA fellowships. Master's, doctoral, and postdoctoral in experimental.

Washington State University, Pullman, Wash. Apply for admission to Dean, Graduate School, by March 15. Tuition: resident, \$125; nr, \$300. Assistantships; 20 hours' work; stipend, \$2,050 ex nr. USPHS fellowships. Other part-time positions available. Apply by March 15. Master's and doctoral in general-experimental, comparative, clinical. PhD in clinical APA-approved.

Washington, University, St. Louis, Mo. Apply for admission to Dept. of Psych. by February 15. Tuition: \$1,100. Scholarships; no work, stipend, \$500–2,200. Fellowships: no work, stipend, \$500–3,000. Apply to Dean, Graduate School by March 1. Departmental assistantships; 19 hours' work; stipend, \$1,630–2,000 ex; apply by March 1. USPHS stipends. Fellowships in program on the aging process; stipend, \$1,800–3,000. Half-time assistantships in industrial; stipend, \$2,000–3,000. Part-time research assistantships in learning, psychoacoustics, social; stipend, \$1,000–

2,000. Other part-time positions available. Master's without specialization. Doctoral in general-experimental, including comparative-physiological, clinical, process of aging, mental retardation. PhD in clinical APA-approved.

Washington, University of, Seattle 5, Wash. Apply for admission to Graduate School and Dept. of Psych. Tuition: resident, \$300; nr, \$600. Fellowships; 20 hours' work; stipend, \$2,115; apply by February 15. Assistantships; 10 hours' work; stipend, \$450; apply by February 15. USPHS stipends. Other part-time positions available. Master's, doctoral, and postdoctoral in child and developmental, experimental, school, social and personality, clinical, quantitative methods and test construction; joint PhD in physiology and psychology. PhD in clinical APA-approved.

Wayne State University, Detroit 2, Mich. Tuition: resident, \$332; nr, \$662.

College of Liberal Arts: Apply by March 1 to Dr. Ross Stagner, Chairman, Psych. Dept. Assistantships; hours of work vary; stipend, \$1,000-2,200 ex. Fellowships; teaching; stipend, \$2,300-2,900 ex. USPHS stipends. NDEA fellowships. Master's doctoral; and postdoctoral in general-theoretical, clinical, industrial, social. PhD in clinical APA-approved.

College of Education: Fellowships; teaching, stipend, \$2,300-2,900 ex. Research assistantships available. Apply by March 1 to Dr. John C. Sullivan, College of Education. Master's in clinical, educational, school. Doctoral in educational, school.

Wellesley College, Wellesley, Mass. Apply for admission to Dean of Graduate Instruction. Tuition: \$700. Assistantships; 20 hours' work; stipend, \$1,800 ex. Women only. Master's in differential, learning, child, social, personality.

Wesleyan University, Middletown, Conn. Apply for admission to Dean, Graduate School, by May 1. Tuition: \$650. Assistantships; 20 hours' work; stipend, \$1,900 ex. Other part-time positions available. Men preferred. Apply by May 1. Master's in experimental (including physiological and comparative), social, personality, development.

Western Michigan University, Kalamazoo, Mich. Apply for admission to Dean, School of Graduate Studies by May 1. Tuition: resident, \$114 per semester; nr, \$180.50 per semester. Fellowships; 15 hours' work; stipend, \$1,500 local fees ex. Apply to Dean, School of Graduate Studies by March 15. Assistantships; 20 hours' work; stipend, \$1,800 local fees ex. Apply to Dept. of Psych. by March 15. Master's in general-experimental, industrial, clinical, school. Two

year program in Clinical and School Psychological Examiner.

Western Reserve University, Cleveland 6, Ohio. Apply for admission to Admission Office, well in advance of admission dates. Tuition: \$32 per credit hour. Scholarships; no work; stipend, \$100 to ex; apply to Admission Office by March 1. Assistantships; 15 hours' work; stipend, \$1,000–1,200 ex 9 hours. Research assistantships in experimental, comparative, and general; assistantships in industrial. USPHS and OVR stipends. Master's in child, general, industrial, vocational counseling. Doctoral in general-experimental, physiological, industrial, clinical. Postdoctoral in experimental, clinical. PhD in clinical APA-approved.

West Virginia University, Morgantown, W. Va. Apply to Registrar and to Chairman, Dept. of Psych., by April 1. Tuition: resident, \$106 per semester; nr, \$271. Assistantships; 15 hours' work; \$1,400–1,950 ex. Full-time externship in child guidance clinic under psychiatric team. Traineeships in rehabilitation counseling. Comprehensive master's degree and interdepartmental MA in rehabilitation counseling. PhD in general-experimental, clinical.

Wichita, University of, Wichita, Kansas. Apply for admission to Dean, Graduate School. Tuition: \$300 per year. Fellowships: up to 20 hours' work; stipend, \$1,500 ex. Apply by March 1. Master's in general-experimental.

William and Mary, College of, Williamsburg, Va. Apply for admission to Head, Dept. of Psych., by May 15. Tuition: resident, \$74.75; nr, \$166.50 per semester. Half-time internship in abnormal psychology at Eastern State Hospital required; stipend, \$115 per month. Master's in general-experimental.

Wisconsin, University of, Madison, Wis. Apply for admission to Dean, Graduate School. Tuition per year: resident, \$220; nr, \$600.

Department of Psychology: Scholarships; no work; stipend, ex nr. Assistantships; 20 hours' work; stipend, \$2,370 per annum, ex nr. Fellowships; no work; stipend, \$1,500-2.160 ex nr. Request forms from Chair-

man, Fellowship Committee, Department of Psychology. Apply by February 15. USPHS stipends. Master's. Doctoral in clinical, comparative, industrial, learning, personality, physiological, sensory (vision and audition), social. Postdoctoral in comparative, experimental physiological, clinical. PhD in clinical APA-approved.

Department of Education: Scholarships; no work; \$1,200 ex nr. Fellowships; no work; \$1,870-2,400 ex nr. Instructional and research assistantships; 15-20 hours' work; \$1,250-3,000 ex nr. Dormitory counseling for room and board; apply to Director of Residence Halls. Request application forms from Chairman, Fellowship Committee, Department of Education; must be returned by February 15 for scholarships and fellowships. Master's and doctoral in educational, guidance, school, measurement and statistics.

Wyoming, University of, Laramie, Wyo. Apply for admission to Registrar and Director of Admissions one month before registration. Tuition: resident, \$246.50; nr, \$508.50. Scholarships; no work; stipend, ex. Assistantships; 18 hours' work; stipend, \$1,602 ex for resident, \$196; nr, \$458. Apply by February 1 to Dean, Graduate School. Master's in experimental, comparative, differential.

Yale University, New Haven, Conn. Application for admission, to Director of Admissions, Graduate School, must be completed by February 1. Tuition: \$1,350. Fellowships; no work; stipend, \$500-3,000. Assistantships; 20 hours' work maximum; stipend, to \$3,350. Complete application to Graduate School by February 1. USPHS stipends. Doctoral in experimental, personality and social, clinical, child development. PhD in clinical APA-approved.

Yeshiva University, 110 W. 57th St., New York 19, N. Y. Apply for admission to Director of Admissions, Graduate School; apply for information to Chairman, Dept. of Experimental and Clinical Psych. Tuition: \$35 per point. Research assistantships; stipend to \$5,000. Department assistantships; stipend, \$2,000–3,000 ex. NSF Cooperative Graduate Fellowships and half tuition scholarships. Doctoral in experimental, clinical, personality and social, school.

RULES AND PROCEDURES

COMMITTEE ON SCIENTIFIC AND PROFESSIONAL ETHICS AND CONDUCT

I. Responsibility and Functions of Committee

Under the Bylaws of the Association, the Committee on Scientific and Professional Ethics and Conduct is set up "to receive and investigate complaints of unethical conduct of Fellows, Members, Associates, and Affiliates; to endeavor to settle cases privately; to report on types of cases investigated with specific description of difficult or recalcitrant cases; to recommend action on ethical cases investigated; and to formulate rules or principles of ethics for adoption by the Association."

Under the Rules of Council, the committee is instructed to establish rules governing its own procedures. Following are the rules and procedures under which the committee operates.

II. Scope and Nature of Authority

The Association has authority only over APA members, being in position to decide whether an individual shall become a member, continue as a member, or be readmitted to membership. It may, for just cause, drop a member from its rolls but may impose no additional penalty for unethical behavior; it may, for lesser cause, administer a reprimand or place a member under surveillance for a stated period.

As responsible citizens, the Association and its members are concerned with the professional conduct of persons who purport to be psychologists but are not members of the Association or of one of its affiliates. Instructions governing such persons are included in the following procedures. However, disciplinary action in the case of nonmembers may be taken only by governmental or other agencies which may have jurisdiction over the person; if requested, the Association may serve such agencies by furnishing factual information and consultation.

The Committee on Scientific and Professional Ethics and Conduct shall deal only with questions of ethics, and then only in investigatory and advisory capacities; the Board of Directors has responsibility for ultimate action, taking into account the findings and recommendations of the committee. Except in matters of ethics, the committee shall not umpire controversies, adjudicate differences of opinion, or presume to censor publications. It shall not use, or permit the use of, its services for personal gain or vengeance, nor release, or allow to be re-

leased, information about ethics cases with malice or primarily with intent to injure the reputation or means of livelihood of any individuals involved. The objective with regard to the individual shall in all cases be constructive and educative rather than punitive in character, the intent being to exert a salutary influence on members found to have violated ethical principles. However, when the interests of the public or of the profession are in conflict with personal interests, the former must be of overriding concern.

In carrying out its responsibilities, the committee shall base its activities on the *Ethical Standards of Psychologists*, adopted by the APA Council of Representatives in September 1958. Reference may be made to the earlier version of the *Ethical Standards of Psychologists*, published in 1953.

III. Correspondence and Records

- 1. The permanent files of the Committee on Scientific and Professional Ethics and Conduct shall be maintained in the Central Office of the Association. Affiliated state psychological associations shall be encouraged to deposit in the central files of the committee such documents as are available on termination of cases handled under their jurisdiction. The files of the committee shall be confidential, as detailed under the rules of Section VII.
- 2. The committee shall conduct as much of its business as is practicable through correspondence. Normally, such correspondence shall be routed through the committee Secretary, a member of the Association designated by the Executive Officer from the staff of the Central Office. Other than in the case of routine inquiries, the Secretary shall forward to the Chairman of the committee a copy of each letter written by the former, together with copies of the documents on which the correspondence is based.
- 3. Complaints concerning unethical practices and inquiries concerning either unethical practices or actions of the committee itself, when received by the Chairman or members of the committee, shall normally be forwarded to the Secretary of the committee for reply.
- 4. All correspondence of a confidential nature relative to a single case shall be restricted to that case alone.

 The committee shall establish and maintain such liaison with the ethics committees of divisions and affiliated state psychological associations as will contribute to the more effective enforcement of the Code.

IV. Receipt of Complaints

- The committee shall recognize complaints received from both members and nonmembers of the Association.
- 2. Upon receipt of a complaint, the Secretary of the committee shall examine the membership *Directory* of the Association and the lists of applicants for membership to determine whether the person complained about is a member of or an applicant for membership in the Association.
- 3. If the person complained about is neither a member nor an applicant for membership, the Secretary may send the person in question an advisory letter, or refer the matter to an appropriate board or committee of the Association, or, where indicated, to the relevant affiliated organization.
- 4. If the person complained about is a member of the Association, the Secretary shall evaluate the complaint in terms of whether it (a) falls within the jurisdiction of the committee as detailed in Section 11, and (b) constitutes, if substaniated, a possible violation of the Code.
- 5. Anonymous complaints shall not be recognized as a basis for any formal action.

V. Adjudication of Complaints

A. Procedure with Applicants for Membership

The Association does not knowingly accept an application for membership which involves misrepresentation, fraud, or error on essential items; it voids membership which may prove later to have involved such actions. The Association asks endorsers of applicants for membership to state whether they know of any unethical conduct on the part of the applicant. Such matters are normally handled by the Membership Committee. The Committee on Scientific and Professional Ethics and Conduct shall review such applications only when referred to it by the Membership Committee or the Board of Directors. On the other hand, any application subsequently found to have contained substantial errors shall be investigated by the committee. If the committee finds that membership was fraudulently obtained, it shall recommend to the Board of Directors that such membership be voided.

- B. Procedure with Former Members (applying for readmission under Article II, Section 18 of APA Bylaws)
- 1. The Secretary of the committee shall receive from the Membership Committee all applications for readmission to membership submitted by persons who have been dropped from membership in the Association or permitted by the Board of Directors to resign on recommendation of the committee.
- 2. An application for readmission shall be considered by the committee only after 5 years have elapsed from the date of termination of membership, and when the regular form of application for membership has been completed with favorable recommendations for readmission from five sponsors who are Members or Fellows of the Association.
- 3. The Secretary shall transmit to the committee a summary of the application for readmission, including complete copies of the statements submitted by sponsors and a digest of the previous case against the former member, together with an appropriate ballot. The committee members shall vote on the action to be recommended, indicating whether: (a) the former member should be readmitted, (b) there should be further investigation or consideration at the next meeting of the committee, (c) readmission should be deferred pending a physical meeting with the applicant, (d) readmission should be refused.
- 4. If further investigation is indicated or a conference is arranged, the committee shall vote on the basis of the findings to recommend whether the former member now be readmitted or whether his application for readmission be reconsidered after a stated period of time.
- 5. When the Committee on Scientific and Professional Ethics and Conduct has reached its decision concerning an applicant for readmission, the committee Secretary shall report the recommendation to the Membership Committee of the Association. Such recommendation shall not be binding on the Membership Committee as to the applicant's academic and professional qualifications for the various classes of membership.

C. Procedure with Members

1. If the person complained about is a member of the Association and the complaint appears to warrant investigation, the Secretary shall inform the member that a complaint against him has been received by the committee. The letter shall describe the nature of the complaint and point out the particular Principles of the Code of Ethics which appear to have been violated by the alleged behavior. The member shall be requested to reply in his behalf as promptly as possibe, in order that the committee may be cognizant of all relevant aspects of the situation. The letter from the Secretary shall be courteous in tone and constructive in spirit.

- 2. If the member complained about is under consideration for advancement in membership status or is a candidate for a Diploma of the American Board of Examiners in Professional Psychology, the Secretary shall at the same time notify the appropriate committee or board of the receipt of a complaint, requesting that consideration of the member's application be delayed until the committee has made appropriate disposition of the case.
- 3. Upon receiving a reply from a member who is complained about, the Secretary shall transmit a copy of the reply to the Chairman of the committee or to an area chairman designated by the Chairman to handle the given case. If in the opinion of the Chairman (or designated Area Chairman) and Secretary the complaint has no basis in fact, is insignificant, or is minor and likely to be corrected, they shall so indicate in the record and not bring the matter formally before the committee for immediate consideration. A report on cases so handled shall, however, be presented to the committee at its next regular meeting. If the committee votes to close the case without further action, the Secretary shall so inform the member in question, the complainant, and such boards, committees, or affiliates as may have been involved.
- 4. If in the opinion of the Chairman and Secretary of the committee the issue raised by the complainant is significant and has not been answered adequately by the member in question, the Secretary shall transmit to the members of the committee copies of the following: (a) the original complaint; (b) the notice from the Secretary of the committee apprising the member of the nature of the complaint and the Principles of the Code that are relevant; (ϵ) the reply of the member to this notice; and (d) such further facts as the Secretary can readily assemble from the records of the Association, correspondence with officers of state associations, or other sources of evident reliability. Accompanying the materials, there shall be a ballot on which each member of the committee may recommend whether: (a) the case shall be closed, (b)

the case shall be held in abeyance until the next regular meeting of the committee, (c) further correspondence is indicated, (d) an ad hoc fact finding committee shall meet with the member in question, (e) the member in question shall be asked to appear before the committee at its next regular meeting, (f) some other action shall be taken.

5. The ballots of the committee members shall be transmitted to the Chairman, who will summarize the vote and report to the committee members and the Secretary of the committee.

6. In accordance with the vote of the members of the committee, the Chairman shall instruct the Secretary as to further steps to be taken in the case.

- 7. If the vote of the committee indicates that further investigation is required, the Chairman may appoint an ad hoc fact finding committee, calling upon appropriate members of the Association, usually from the local area, to constitute such a committee. Where feasible, a member of the Committee on Scientific and Professional Ethics and Conduct shall serve on the ad hoc committee. Once having agreed to serve, the members of the fact finding committee shall be briefed on the necessity for conducting the investigation in such a way as to avoid injury to the reputation or means of livelihood of the member in question; they shall at the same time be furnished with the pertinent documents in the case.
- 8. In an investigation of the conduct of a member, the committee's primary concern is with his performance as a psychologist. His private life may be considered by the committee only if there are allegations of conduct such as to injure the profession. In the judicious evaluation of such allegations the committee shall be mindful of the traditional rights of nonconformity. Care shall be taken that such general, and additional, considerations not be introduced without having been explicitly stated and having been open to examination at the time of the hearing before the committee or its representatives.
- 9. In its investigation the ad hoc fact finding committee shall explore all sources of pertinent information, including hearing such witnesses as may be suggested by the member, if it appears reasonable that they are in position to offer pertinent evidence.
- 10. Insofar as possible, the committee shall seek to safeguard the anonymity of complainants. However, it is recognized that there may be times when it may not be possible to protect the complainants' identity and proceed with the case. In such situa-

tions, the complainant shall be so advised and the disclosure of identity shall not be made unless his consent is obtained.

- 11. Where the committee finds the case to involve serious violation of the Code of Ethics, it shall recommend appropriate action to the Board of Directors. In so doing, the committee shall cite the Principle(s) of the Ethical Standards of Psychologists judged to have been violated and present evidence to substantiate its findings and recommendations.
- 12. No action unfavorable to a member of the Association may be recommended to the Board of Directors until the member has been offered the opportunity to appear before (a) an ad hoc fact finding committee and/or (b) the committee itself. Further, in the event that the committee subsequently recommends to the Board of Directors action unfavorable to the member, he shall be informed of such recommendations and offered the additional privilege of requesting a hearing before a panel selected by the President of the Association, as provided in Article II, Section 17 of the APA Bylaws.
- 13. The Chairman of the committee, its Secretary, or a member of the committee designated by the Chairman shall be prepared to appear before the Board of Directors to present and adequately support the findings and recommendations on cases referred to the Board of Directors. Where the member in question requests the hearing before a panel selected by the President, the committee shall be, responsible for having a representative at the hearing to present its findings.

VI. Clearance of Cases

- 1. In connection with each regular meeting of the committee, the Secretary shall prepare a listing of every case in progress, indicating in outline form the pertinent steps leading up to its present status. At its Annual Meeting, the committee shall act on each case in its current files, deciding whether consideration is to be continued or whether the case may be closed after appropriate final steps have been taken.
- 2. The committee shall make an interim report of its activities at the spring meeting of the Board of Directors and shall prepare an annual report for presentation to the Board of Directors and Council of Representatives at the Annual Business Meeting of the Association. Such reports will contain, anonymously, an analysis of the cases in the current files of the committee, indicating (a) the gen-

eral nature of the complaint, (b) the Principle(s) at issue, and (c) the status of each case.

3. Cases shall be adjudicated by the committee as expeditiously as possible. A case shall be considered automatically cleared, and the parties involved so notified, if no action has been taken by the committee after 2 years have elapsed from the date of the original complaint. On the presentation of additional evidence of unethical behavior, any case that has been previously closed may be reopened and considered anew by the committee. In such a case, the procedures described in Section V shall be followed.

VII. Communication on Cases

- 1. The work of the committee, including information and recommendations on all cases before it, shall be kept confidential, except that upon request from groups specified in the Bylaws, it shall cooperate in exchanging such information "as the Committee deems necessary to maintain ethical practice by psychologists at the highest level." In all communication or exchange of information, due care shall be taken to avoid unnecessary injury to the reputation of the member in question or to his right to earn a livelihood.
- 2. Whenever the committee decides that charges against a member indicate that investigation is needed, the Secretary and any investigator may request, in confidence, information pertinent to the case from the persons and witnesses involved; from members of APA who may possess information or evidence; from boards, committees, and divisions of the Association; and from the ethics committees of relevant affiliated organizations. Upon request to the committee from divisions and affiliated organizations, it shall reciprocate in giving information pertinent to ethics cases.
- The committee shall not give information on cases before it to government authorities (other than those listed elsewhere) unless legally so required.
- 4. Except when exchanging information with divisions, affiliates, and government authorities, the committee shall release no information about ethics cases. All further release of information is a responsibility of the Board of Directors which has delegated the responsibility to the Executive Officer of the Association and the Secretary of the committee. The latter, when acting as agents of the Board, shall not release information about ethics cases other than that the individual is or is not a member of the Association and the dates of membership and its termination.

INSTRUCTIONS FOR THE PREPARATION OF ABSTRACTS

Beginning with manuscripts submitted for publication in the 1963 volumes of journals published by the American Psychological Association, authors will be required to submit an abstract with each article. (Editors may begin the practice sooner if they so choose.) The abstract should be typed on a separate piece of paper and conform to the instructions below. It will be published at the beginning of the article and in many cases, but not necessarily all, will take the place of a summary at the end of the article.

- 1. The abstract should not exceed 15 lines of pica or 12 lines of elite type when the line width is about 6 inches. This amounts to 100 to 120 words,
- 2. Except possibly for the first sentence which might read "An experiment . . ." or "A review . . ." all sentences should be complete sentences. Avoid telegraphese. Do not repeat information in the title.
- 3. An abstract of a research paper should contain statements of (a) the problem, (b) the method, (c) the results, and (d) conclusions. Results are most important, and every abstract should contain at least the trend of results. It is also highly desirable to state the number and kind of Ss, the kind of research design and the significance levels of results.
- 4. An abstract of a review or discussion article should state the topics covered and the central thesis(es), if any, of the article.
- Do not use such phrases as, "The author concludes," for it is assumed that statements in an abstract are those of the author.
- All cardinal numbers should be in arabic and not spelled out, even at the beginning of a sentence.
- 7. A series of statements is designated by letters—e.g., "Conclusions are (a) . . . (b) . . . (c) . . ." etc.
- 8. Standard abbreviations should be freely used; others, judiciously and with care to be sure the meaning is clear—e.g., after once referring to "the Saturday practice group (SPG)," later write merely SPG.

SUMMARY REPORT OF JOURNAL OPERATIONS: 1960

COUNCIL OF EDITORS

	Manuscripts			Printed Pages			Subscriptions	
Journal	Number Received	Number Accepted*	Percentage Rejected	Articles Published	Total Pages Published ^b	Average Lage	Memberd	Non- member
American Psychologist	145e	41	72%	52°	1,056	7.0 mos.	17,874	1,296
Contemporary Psychology	(592)s	(512)	(14)	(208)	464	6.7h	5,824	1,300
Journal Abnormal and Social								
Psychology	503	205	59	153	1,000	13.7	4,444	2,164
Journal of Applied Psychology	199	95	52	87	444	9.8	2,385	1,959
Journal of Comparative and Physio-								
logical Psychology	293	171	42	124	656	10.8	1,524	951
Journal of Consulting Psychology	427	134	69	116	612	11.4	4,855	1,581
Journal of Educational Psychology	208	57	73	58	392	8.1	2,394	2,242
Journal of Experimental Psychology	405	209	48	133	912i	12.6	1,652	1,398
Psychological Abstracts	(6,629)i	-	-	(8,532)	(984)	-	5,718	2,431
Psychological Bulletin	122	59	52	30	560	12.2	5,459	1,480
Psychological Monographs	71	24	66	17	576	12.0	1,292	769
Psychological Review	137	30	76	28	432	9.5	4,626	1,692

^{*} Including manuscripts returned for revision (and then presumably acceptable).

b Includes early publication pages, ads, and covers.

c Lag is the average interval between date of receipt of the manuscript and month of issue.

d Includes Foreign Affiliates and members of the Student Journal Group.

Does not include official or obligated manuscripts nor comments.

I Includes ads, covers, official or obligated articles, and departmental material.

Books received for review, rather than manuscripts.

Average interval between acceptance of review and month of issue.

Includes 20 pages published under grant from National Science Foundation,

Abstracts received for processing.

AMERICAN BOARD OF EXAMINERS IN PROFESSIONAL PSYCHOLOGY, INC.

1961 ANNUAL REPORT

HE American Board of Examiners in Professional Psychology (ABEPP) presents its fourteenth Annual Report.²

Candidacies Received. Since its incorporation on April 23, 1947, 2,471 candidates have applied for the Diploma of ABEPP. 914 applications were submitted under provisions of the Bylaws which require that the candidate hold the PhD degree, present 5 years of acceptable qualifying experience, and perform satisfactorily on both written and oral examinations. 1,557 applications were received under a "grandfather" provision which terminated December 31, 1949.

Candidacies Received under the Provision of Mandatory Examination. To date, 914 candidacies have been received under the provision of mandatory examination. The chronological order in which these candidacies were received is as follows: 1949, 68; 1950, 23; 1951, 22; 1952, 8; 1953, 49; 1954, 80; 1955, 84; 1956, 57; 1957, 90; 1958, 94; 1959, 114; 1960, 125; 1961, 100. Table 1 gives a summary of ABEPP actions and indicates the status of these candidacies.

To date, 759 candidates have taken the written examination. 631 (83%) passed the written examination on the first attempt. Of the 128 who failed on the first attempt: 49 passed on a second examination, 16 failed on a second attempt, 25 were terminated for failure to appear for re-examination, and 38 are awaiting re-examination.

Of the 680 who passed the written examination: 661 have taken the oral examination, 2 candidacies were terminated for failure to appear for oral examination, and 17 candidates are awaiting oral examination.

Of the 661 taking the oral examination the first time, 14 are awaiting evaluation by ABEPP. Of the 647 which have been evaluated: 396 (61%) passed on the first attempt, and 251 failed on the first attempt. Most candidates whose performance

¹ With reference to publication of historical and legal information concerning the work of ABEPP, see similar footnotes in previous annual reports. For announcements since the 1960 Annual Report, see *Amer. Psychologist*, 1961, 16, 48, 132-141, 154-155, 211, 542-543, 667-668, 721.

is judged as unsatisfactory fail only a portion of the total examination.

Of the 251 who did not pass on the first attempt: 123 have qualified on second examination, 56 failed to qualify on second examination, 60 have re-examination pending, 4 re-examinees are awaiting evaluation, and 8 candidacies have been terminated for failure to appear for re-examination.

In summary, 79% of candidates taking the oral examination pass on the first and second attempts.

Candidacies Received from Senior Members of the Profession. A total of 1,557 candidates applied for the Diploma under the "grandfather" provision. 1,116 awards have been made to senior members of the profession, 440 candidacies have

TABLE 1 SUMMARY OF THE STATUS OF CANDIDACIES RECEIVED

UNDER PROVISION OF MANDATORY EXAMINATION Diplomas awarded...... 519 Candidacies in process..... Cases presenting insufficient experience..... Admitted to written examination; examination pending.... Written examination passed; oral examination Written examination failed; re-examination pending..... Oral examination failed; re-examination pending Oral examination completed in 1961; not yet evaluated by ABEPP..... 148 Candidacies terminated..... Failure to continue candidacy toward meeting requirements..... Failure to appear for written examination (two invitations)..... Failure to appear for written re-examination within three years.... Failure to appear for oral examination..... Failure to appear for oral re-examination within

three years.....

Deceased.....

Total.....

TABLE 2
DISTRIBUTION OF DIPLOMATES ACCORDING TO SPECIALIZATION AND SEX

Candidates Qualifying under Provision of Mandatory Examination:

	Men	Women	Total
Clinical	400	52	452
Counseling	31	1	32
Industrial	34	1 .	35
	-	-	
Total	465	54	519
Senior Members of th	e Profession	:	
	**		700

	Men	Women	Total
Clinical	379	340	719
Counseling	172	65	237
Industrial	154	6	160
	-		_
Total	705	411	1116

been terminated, and 1 is in the process of examination.

Classification of Diplomates by Specialty and Sex. Table 2 gives distributions of ABEPP Diplomates according to specialty and sex.

Written Examinations. In the fall of 1960, 145 candidates appeared for written examinations. 123 of these candidates appeared for the first time; 22 candidates were re-examinees.

ABEPP's written examination presently consists of two sections: A Professional Objective Examination and an Essay Examination. The objective examination of approximately 200 items covers psychological knowledge basic to the specialty. One portion of the essay examination is devoted to the major areas of professional practice. A second portion measures skill in the evaluation, interpretation, and use of research findings in the candidate's field of specialization.

226 Diplomates participated in the evaluation of essay examinations in the fall of 1960. Each answer to a given question was read and evaluated independently by 4 Diplomates. ABEPP has a continuing annual revision of its written examinations. Diplomates are invited to participate in this attempt to maintain a written examination that is appropriate for professional psychologists with a minimum of 5 years of acceptable professional experience.

Final date each year for making application for admission to written examination is March 1.

Oral Examinations. In the spring and summer of 1961, 148 candidates appeared for oral examination at the following centers: New York City, Boston, Chicago, Minneapolis, and Los Angeles.

173 Diplomates served on ABEPP's examining committees. A present or former Trustee of ABEPP was chairman of each examining committee. ABEPP acknowledges with appreciation the services of the following former members who served as chairmen in 1961: Reign H. Bittner, Stanley G. Estes, Mortimer M. Meyer, Anne Roe, Harold C. Taylor, David Wechsler, Austin B. Wood, C. Gilbert Wrenn, and George K. Yacorzynski.

Changes in ABEPP's Procedures. Beginning in the spring of 1961, ABEPP introduced a new procedure for informing candidates of their performance on oral examinations. Within 2 weeks after the close of the examinations at a given center, all candidates receive an official communication from ABEPP. Within this period, pass or fail decisions are made on most candidates. In a few cases, recommendations of the examiners create doubt as to whether the candidate has met minimal standards for the Diploma. These are referred to ABEPP for review at its next physical meeting.

Definition of a Diplomate and the Meaning and Value of the ABEPP Diploma. ABEPP studied the recorded comments of oral examiners who made pass or fail judgments on the professional competence of several hundred candidates for the Diploma. These recorded comments were studied and classified.

In its continuing concern for the meaning and value of its Diploma, ABEPP, in 1960, by means of a questionnaire, sought the opinions of its Diplomates who had earned the award by successful performance on examination. Approximately 90% of the Diplomates returned the completed questionnaire. Responses to these questionnaires were tabulated.

The results of these two studies together with other pertinent information on the work of ABEPP were published in an article, "The Meaning of the ABEPP Diploma," which appeared in the March 1961, issue of the American Psychologist.

Increased Activities of ABEPP. In November 1960, more candidates (145) appeared for written examinations than in any previous year. This was true also for the oral examinations administered in

the spring of 1961, when 148 candidates were examined. This increased activity has required a greater contribution of services on the part of Diplomates. ABEPP, in the "Notes and News" department of the American Psychologist, has recognized and expressed its appreciation for the unreimbursed services of Diplomates who have served as proctors of written examinations, as readers of essay examinations, and as oral examiners.

ABEPP Officers and Trustees. Present officers are: President, Kenneth E. Clark; Vice-President, Edwin R. Henry; and Secretary-Treasurer, Noble H. Kelley.

On October 1, 1960, Edwin S. Shneidman was elected Trustee of ABEPP to replace Mortimer M. Meyer, whose term of election expired.

Information on Procedures for Candidacy. ABEPP has prepared a statement entitled Policies and Procedures. This pamphlet gives specific information on requirements for candidacy, fields of certification, the nature of acceptable qualifying experience, evaluative procedures (including written and oral examinations), and policies governing

candidacy and examination. Copies are available to prospective candidates, to university departments of psychology, for distribution to graduate students in training, and to other interested persons.

Inquiries for information on the work of ABEPP and concerning procedures for candidacy should be addressed to the Secretary-Treasurer: Noble H. Kelley; ABEPP; Southern Illinois University; Carbondale, Illinois.

AMERICAN BOARD OF EXAMINERS IN PROFESSIONAL PSYCHOLOGY, INC.

> EDWARD S. BORDIN KENNETH E. CLARK PHILLIP A. GOODWIN RALPH W. HEINE EDWIN R. HENRY NOBLE H. KELLEY JOHN W. MACMILLAN PAUL E. MEEHL EDWIN S. SINNEIDMAN ALBERT S. THOMPSON

July 31, 1961

Convention Note

* * * * * * * * * * * * * * * * * * *

TO THOSE WHO SERVED:

During the 1961 Annual Business Meeting, the APA Council of Representatives voted "that we take full cognizance of the loyal and imaginative contribution made to the Convention by Charles N. Cofer and Alexander G. Wesman and the entire membership of their respective committees on local arrangements and program, and that we are again in debt to George S. Speer for his omniscient supervision of convention affairs. To all these, we express our thanks. Be it further ordered that a list of those members who contributed their services to the Convention be published with the record of these proceedings in the American Psychologist."

As APA relies heavily on its members for assistance in making convention arrangements, it is indeed fortunate that those designated readily accept their responsibilities and execute their assignments with initiative and dispatch. The APA is also grateful to the members of Psi Chi, the VA trainees, other students, and those friends, relatives, and associates of convention personnel who volunteered their much needed services during the course of the convention.

Herbert Abelson Scarvia B. Anderson Jon Bentz Edwin Berdy Mrs. Hugh Bowen Ralph Colvin Mrs. Jerome Ely Dora Fisher Emmanuel Fisher Virginia Glenn Alice Gustav Robert Hart Norma Joseph Bernard Kalinkowitz Mildred Katzell Raymond Katzell Mrs. James Keenan Dorothy Krugman David Lerner Bernard Locke Edward MacGehee Robert Morrow Charles Ramond Fabian Rouke Lorraine Sachs Harry Sands

Elliott Schuman
Virginia Staudt Sexton
Thomas Sprecher
Barbara Tate
Mrs. Martin Tolcott
Dik Twedt
Herman Weiss
Mrs. Joseph Weitz
Marjorie White
Marguerite Wilke
Walter Wilke
Richard Zegers

Convention Calendar

tember 5, 1962; St. Louis, Missouri

For information write to:

George S. Speer American Psychological Association 1333 Sixteenth Street, N.W. Washington 6, D. C.

Southeastern Psychological Association: March 29-31, 1962; Louisville, Kentucky

For information write to:

Ray H. Bixler Department of Psychology University of Louisville Louisville 8, Kentucky

Southwestern Psychological Association: April 5-7, 1962; Fort Worth, Texas

For information write to:

Gordon V. Anderson University of Texas P. O. Box 8017, University Station Austin 12, Texas

Southern Society for Philosophy and Psychology: April 19-21, 1962; Memphis, Tennessee

For information write to:

Dan R. Kenshalo Department of Psychology Florida State University Tallahassee, Florida

American Psychological Association: August 30-Sep- Eastern Psychological Association: April 26-28, 1962; Atlantic City, New Jersey

For information write to:

Marvin Iverson P. O. Box 601 Garden City, New York Deadline for papers: December 1, 1961

Midwestern Psychological Association: May 3-5, 1962;

Chicago, Illinois

For information write to:

G. Robert Grice Department of Psychology University of Illinois Urbana, Illinois

Rocky Mountain Psychological Association: May 10-

12, 1962; Butte, Montana

For information write to:

Thomas C. Burgess Montana State University Missoula, Montana

American Association for the Advancement of Science: December 26-31, 1961; Denver, Colorado

For information write to:

Raymond L. Taylor American Association for the Advancement of Science 1515 Massachusetts Avenue, N.W. Washington 5, D. C.

PSYCHOLOGISTS—LOOKING FOR A VARIED PROFESSIONAL CAREER?

The Veterans Administration Center, Dayton, Ohio has staff vacancies for an expanding, community oriented Psychology program emphasizing treatment, rehabilitation and research. Positions are available for qualified PH.D's with clinical, counseling or research specialties in a diversified 2400 bed hospital and convalescent-rehabilitation center.

The psychology program maintains an established training affiliation with the Ohio State University, including regular consulting visits from the University staff. A separate and well-equipped research laboratory is also available. The program emphasizes professional freedom to develop new concepts and opportunities to implement ideas in a flexible, pleasant multi-disciplinary setting. The Center is characterized by extensive training and residence programs in many medical and co-professional areas.

Dayton is located in southwestern Ohio where within fifty miles more than a dozen universities are located. Dayton is well situated geographically and offers many educational and cultural facilities to its approximately 700,000 metropolitan population.

Starting salaries are \$7560 or \$8955 depending on qualifications and include all Civil Service benefits. An expanding program offers opportunities for further promotion.

Please write or call:

CHIEF, PSYCHOLOGY SERVICE

Veterans Administration Center 4100 West Third Street, Dayton, Ohio



clinical psychologists

GOOD SALARIES EXPANDING PROGRAMS California's expanding mental health and correctional rehabilitation programs offer the clinical psychologist professionally broadening opportunities. These are long range projects planned to meet the needs of the nation's fastest growing state. Facilities located throughout California provide a choice of both geographical environment and type of practice. Immediate openings.

Good salaries. Promotion by merit program. Libera! employee benefits. A Ph.D. in Clinical Psychology or its equivalent is required.

Inquiries will be welcomed. Write: Medical Personnel Services State Personnel Board, 801 Capitol Avenue, Sacramento 14, California As a Human Factors Scientist you may have been curious from time to time about the role played by your science in the new technology of "control systems."

The term "control system" in this context is a convenient abbreviation for "systems that help men make correct decisions and exert control on a continental and world-wide scale." The new Strategic Air Command Control System (SACCS) is an example of such a system SACE is quother. System Development Corporation

Have you considered HUMAN FACTORS IN SYSTEMS FOR DECISION?

tem. SAGE is another. System Development Corporation is a major contributor to both. And we are working on several other new extremely large systems.

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